AMERICAN AGRICULTURIST.

Agriculture is the most healthy, the most useful, and the most noble employment of man.—WASHINGTON.

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THE

AMERICAN AGRICULTURIST

AND

FARMERS' CABINET.

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CONTENTS OF JANUARY NUMBER.

TO OUR READERS.

THROUGH occasional doubt and frequent discouragement, we have completed eight volumes of our Agricultural Journal. In this commencement of our ninth volume, we crave for a moment, your particular attention. We ask the farmers to look at their relative amount of intelligence in their own profession or pursuit, as compared with any other in the country, demanding an equal investigation and acquirement. What means are you employing to secure that attainment in the principles and practice of your art, which is essential to your highest success? These are important questions and they are worthy of a brief answer.

We believe the farmers are *not*, as a body, doing a tithe of what they should for the advancement of their individual or collective interests; and we further believe, *that the foundation of this apathy lies in their neglect to sustain and read the best Agricultural Journals.* Of the 20,000,000 of our inhabitants, more than three fourths of whom are engaged in agricultural and horticultural pursuits, and most of whom obtain their entire support from these avocations, *not one in two thousand, and we much doubt if there is one in three thousand, who subscribe for and read a purely agricultural paper!* Subtracting females and children from the mass, it will greatly diminish this enormous disproportion. Yet what other class of citizens would submit to such a general destitution? That our fathers subsisted without agricultural papers, is no satisfactory answer. They even lived without rail-roads, steam-engines, and not a few without hats, boots or breeches. Indians and Hottentots get along without them now; but the inquiry is not how much ignorance this pursuit will bear and yet be tolerated or kept alive, but how much knowledge the inquiring spirit of this age should incorporate with it.

How should a person know anything unless he is taught? Men are not born with knowledge, and even in instincts they are far behind the brute creation. A young alligator or duckling betakes itself to the water with the shell yet on its head; but what infant ever found its way to the mother's breast without the assistance of its nurse? How much less should he, instinctively or through his own unaided reason, in any successive stage of his existence, resort to the elaborate cultivation of the earth for a subsistence? Why does he manure and plow his field, sow his seed, and cultivate it afterwards, with any expectation of procuring food thereby? The reply to all this simply is, *he has been taught it.* How? Sometimes by precept, but generally by example. In the last instance, the lad stands by and sees his more experienced companion do a certain thing; in the former, he arrives at the same knowledge by reading or conversation. And what are the relative advantages of these two modes of learning?

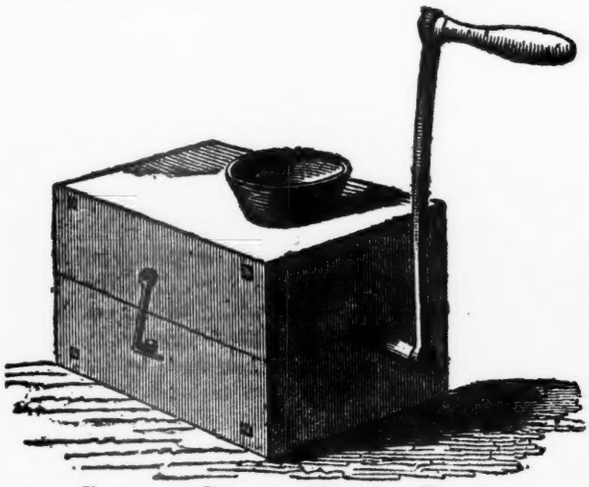
A familiarity with the use of implements, seeds, crops, and the manual operations of the farm are much more readily and effectually, and therefore appropriately, learned by example. All other knowledge may be indifferently learned either by seeing, hearing, or reading. So that he learns his business rightly, it matters not how the farmer comes by his information. In seeing, we learn just what is before us and no more, and we may have a very ignorant, stupid, or faulty teacher; in reading, we may possibly have the same; but in the last case we have access to twenty, fifty, or even one hundred, in our best agricultural journals and books instead of a single oral teacher; and if he possesses any discrimination and judgment, he can try each by all the others, and if there be ignorance, stupidity, or error, he can thus readily detect it. He may have the recorded experience and accumulated knowledge of the world, condensed in a comparatively few volumes, arranged on his library shelves, within convenient reach of his easy chair; and the daily experiments and improvements of an experimenting and improving age, may be regularly brought to his door by the postman, in the best agricultural periodicals of the day. Can this be a bad, or even an indifferent mode of acquiring knowledge, in a science and art which combines no inconsiderable share of nearly all other sciences? Yet *this is book-farming*—a cant, unmeaning phrase, which ignorance deems worthy to provoke derision and contempt whenever uttered.

We take this bull by the horns and say, it is this very *book-farming, which must be sought as the principal and almost only means of improvement in agriculture.* What could one man, or one neighborhood, or even one State accomplish in this commendable career, were they to be shut out from all the world besides? From the bottom of our hearts, we pity the man, who scorns or neglects the teachings of the intelligent men, employed wherever the art of printing is known and practiced, in communicating reliable discoveries and improvement through the press. While stupidity scoffs, and jeers, it does not consider that nearly every particle of information it possesses, and has so long practiced for its own benefit, has been derived directly or indirectly from tradition or books, which are but different caskets to hold the same jewels, though the latter are by far the most safe and reliable. In reflecting on this stolidity, or it may more appropriately be styled, *ingratitude*, we are reminded of the blunt but truthful remark of an eccentric friend, that a pig fills his maw with fruit or mast, without ever looking up to the tree which has furnished it.

A GOOD TEMPER ESSENTIAL TO BREEDING ANIMALS.—Never breed from a bad tempered animal if you can possibly avoid it. Good or bad temper in animals is transmitted to their offspring with the same certainty that a good or bad loin or brisket may be, or coarse legs, head or horns. You cannot, therefore, be too careful on this point as well as all others in selecting your breeding animals. Many a person has been killed by bad tempered horses and bulls, and even females have occasionally done serious injury. We think agricultural society committees ought to take into consideration the temper of animals, as well as other good or bad points, before passing judgment upon them.

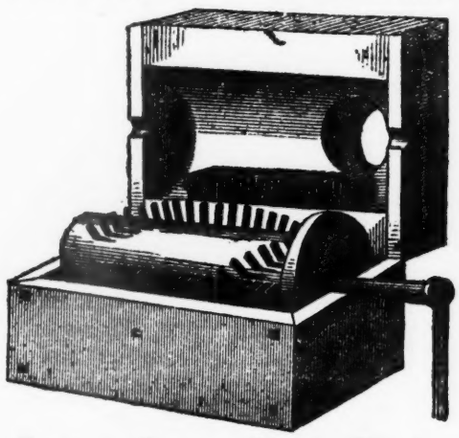
SAUSAGE CUTTER.

This is one of those minor improvements of the present day, which contribute largely to the comfort of individuals and families and the dispatch of a heretofore irksome job. By the aid of this simple contrivance, the meat, whether for a hash, mincepies or sausages, is placed in a hopper, and on turning a crank, which may be done by a child, the contents will be discharged from the opposite end, of any required fineness.



Sausage Cutter (Shut).—Fig. 1.

This implement consists of an oblong box, 13 inches in length by about 8 inches square, with a cavity 5½ inches diameter through the centre, and closed at each end. A hole on the top of one extremity for a small hopper, receives the meat, while another in the bottom at the opposite end discharges it. A crank at one end, turns a solid wooden cylinder in the centre, to which are attached two or more rows of spiral irons pins, that press the meat outwardly through a succession of sharp steel knives, set within the box. It is made finer or coarser according to



Sausage Cutter (Open).—Fig. 2.

the rapidity with which it is fed. One machine will cut several hundred pounds per day. Price $5 for the small size and $10 for the large.

It is the opinion of some eminent chemists that, weight for weight, barley is nearly as exhausting as wheat, as it contains quite as much inorganic material, and differs only in its organic composition.

OUR PRESENT VOLUME.

In carrying out the designs of this journal, we have taken measures to make the present volume more worthy of the reading public than any of its predecessors. A new font of type has been cast expressly for it, the engravings will be more numerous and expensive, the paper of a superior quality, and the matter throughout eminently practical and useful.

Mr. D. J. Browne, author of the "Sylva Americana," will continue to write on various subjects, but more especially on those of Economical Botany, and other branches of Natural History. Dr. Antisell, favorably known as a practical farmer and lecturer, will give analyses of soils, and an occasional article on Agricultural Chemistry and Geology. Mr. S. B. Parsons will contribute several pages monthly on Horticulture. His long practical familiarity with this subject at home, and observations during an extensive tour in Europe among the nurseries, gardens, and conservatories of that country, eminently qualify him for the task he has undertaken. We have before announced, that Mr. Solon Robinson, who has long been familiar with the agricultural public in every section of the Union, is now on a southern tour, and during the ensuing spring and summer, will travel through the northern States; and all the valuable facts and improvements which an active and intelligent mind, in direct contact with the most enlightened farmers and planters throughout the country can condense for our paper, will be given through our columns. Nor are the ladies to be neglected. Their department will receive particular attention, by the contributions of several skilful, practical, and highly intelligent housewives, whose names, through diffidence on their part of being known as public writers, we are not at liberty to mention. The General Farming and Stock Department, will, as heretofore, be managed by the Editors, with the aid of a number of able correspondents from different parts of the Union.

And to these last, now, we make our most earnest appeal, that they will give us in the most condensed and reliable form, such new and approved facts, systems or practice as they may deem of interest to be known. In this way the knowledge of each will be accessible to all, and every man will thus be multiplied a thousand fold, in his usefulness to himself and the public. You are scattered over a widely diversified soil, through various climates, and are engaged in bringing to maturity almost every variety of useful product—products on which depend the comfort, the health—yes, the very lives of yourselves, your families, and your fellow beings. Henceforth let us have your best experience on all matters connected with an enlightened agriculture. Write often if it be but briefly. In this way you will greatly benefit yourselves as well as others.

Wetting Brick.—Few people except builders, are aware of the advantange of wetting bricks before laying them. A wall twelve inches thick, built of good mortar, with brick well soaked, is stronger, in every respect, than one sixteen inches thick built dry.

ADVANTAGES OF DRAINING AND SUBSOIL PLOWING.—No. 1.

Soils that are composed of stiff clay, light sand or gravel, are not often benefitted by subsoil plowing, unless previously prepared for this operation. Stiff clays ought in all cases, to be first thoroughly *underdrained* by some one of the most approved methods now in use. The water, which is held in these soils, and which escapes only by slow evaporation keeps the land cold, and in a condition totally unfitted to the growth of any useful vegetable. Even rice, which is particularly an aquatic plant, requires a change of water to secure its growth. Stagnant water would be fatal to this crop. How much more certainly deleterious, is a soil thus saturated, for all those useful vegetable products, which require a well-divided, well-drained porous soil, through which the roots can range in every direction in search of food. Such soils are especially termed *cold*, and for this reason.

It is a well-established principle, that *sensible* heat becomes *latent* or concealed, when it is absorbed by water or any other substance, which in consequence of this absorption, is changed from a solid to a liquid, or from a liquid to a gaseous state. Thus, if we take a piece of ice at zero, and expose it to a temperature above the freezing point, its own temperature will be slowly raised till it reaches 32°, at which it changes to a liquid. At this point it will remain, no matter how great the heat to which it may be exposed, till all has melted. From the instant the ice reached 32°, the heat absorbed till it is converted into water, becomes *latent;* and this is not perceptible to sensation, or by the use of any philosophical instrument hitherto constructed. It would be a vast stride in science, should such an instrument at any time hereafter be discovered.

If the water be then exposed to a heat above 212°, it will, as in the case with ice, be gradually carried up to that point, when, if not shut in by a powerful vessel, as in steam boilers, so as effectually to prevent evaporation, it will remain at 212°, though exposed to the same temperature as before, till all the water is converted into vapor. And, just in the same manner as ice absorbed a large quantity of sensible heat and rendered it latent, to change it from a solid to a liquid, so does the liquid absorb a large amount of heat to convert it into vapor, which, by this conversion, and solely in consequence of it, is rendered latent or insensible.

Now, if a farmer once understands this principle, he will readily comprehend why soils that are saturated with water, are with peculiar propriety termed cold and unproductive. The heat of the sun and atmosphere, which is absorbed by porous soils, and thus elevates their temperature and stimulates vegetation, is almost exclusively exhausted in evaporating the superfluous water of wet soils. Instead of the beneficial effect of warming the ground, which it was intended to have produced, the heat is employed to remove the water which the lazy or shiftless owner should have got rid of by underdraining; and the roots of the plants are pinched or entirely repulsed by their cold, clammy bed, instead of being kindly invited to a wide and rapid extension in a genial soil.

Draining has this further and great advantage, that by leading off the water from the soil at its base, the cracks, pores or interstices, just before occupied by the water, are at once filled by the air which presses after it (for there can be no vacuum); and this air imparts whatever sensible heat it may possess above that of the soil, till an equilibrium of temperature is restored.

Another beautiful result follows the transmission of air through the soil, when the temperature of the former is more elevated than the latter. The atmosphere always holds watery vapor, which we have seen absorbs a large quantity of latent heat. When the temperature of the air is lowered, it is compelled to part with a portion of this vapor, which is converted into sensible moisture, dew or rain, and which is thus deposited in the soil, and directly in contact with the roots; and while engaged in this operation another beneficent law compels it to give up all the latent heat required by its change from water to vapor, and which on being made sensible, is at once absorbed by the soil.

The air which presses after the water drawn off by underdrains, also carries with it large quantities of fertilizing gases, as ammonia, carbonic acid, &c. These, although existing in minute proportions through the atmosphere, yet afford to growing vegetation a large aggregate of their ultimate product. The air contains from over 94 to 99 per cent. of the elements which make up the entire vegetable growth, whether it be wood, grain, grass, roots or other products; and although much of this amount may be and undoubtedly is derived from the soil, yet its minute division and the circulation of air through it, contribute greatly to the augmentation of the crop. Besides the nutritive gases brought into the soil by a free circulation of air, others are formed in fertile soils, from the same cause. The oxygen brought into contact with the vegetable matter in the soil, converts it into carbonic acid, and being formed at the mouth of the rootlets of the plants, is immediately carried into their circulation and deposited, thus contributing to their growth. Ammonia may be formed by the attractive and condensing properties of the alumina and carbon of the soil, and nitric acid, such an efficient aid in vegetation, is undoubtedly thus produced by fertile calcareous soils, or such as contain large proportions of lime.

The benefits resulting from the circulation of air through a fertile, well-drained soil can scarcely be overrated. It was the secret of Jethro Tull's great success, in his system of thorough pulverization. By this means, he secured the ready admission and escape of the air, which not only brought with it heat, moisture and all the *organic* elements of the crops, but by acting on the mineral constituents of the soil, it set such of them free as were necessary to furnish their *inorganic* portions, and thus the whole product was made up with scarcely the addition of manures. An originally fertile soil, with its mineral ingredients properly proportioned, when

thus treated, will continue to bear good crops for a long time, without the addition of manures. We mention this as illustrating a principle, but not as sanctioning the practice of omitting the use of manures; for it scarcely admits of a question, that the application of manures, both mineral and prutrescent, are to a certain extent, the *cheapest* method of effecting the minute division of the soil, so essential to the free circulation of the air, and consequently, to the growth of plants. In addition to this great advantage, they contain the appropriate food of plants, which must necessarily augment their growth. A barren soil is incapable of deriving much benefit from the circulation of air within or through it. Such are the almost purely silicious (sands or gravels), and the barren clays. They are lacking in the proper materials or the nice adjustment of their elements, which is essential to their seizing upon and hoarding up the food of plants, so profusely brought to them by the atmosphere. The effect of atmospheric circulation is further shown, by the rapid growth of potted plants. These having a porous, fertile soil to revel in, thoroughly ventilated by a hole in the bottom of the pot, through which the air circulates freely, and in consequence of which an incredible amount of moisture and fertilizing atmospheric gasses are condensed, grow with a rapidity and produce results which are unattainable by plants under any circumstances less favorable. The yield in flowers and fruits, from small shrubs and plants, under these favorable circumstances, is quite astonishing, as is shown by the great quantity of pet japonicas, jessmines, geraniums and roses; and the oranges, lemons and even figs that are gathered within a single season from one small and unpretending stalk. On disentering their roots, they will be found to have crossed each other in every direction, and almost to have usurped the entire space allotted them, to the exclusion of no small portion of the earth.

As a further illustration of this principle, we instance the fact, that many of the small underdrains have been found nearly or quite choked up by the roots of perennial plants, that have for years been allowed to grow near them, the roots in some instances, having run for a distance of 15 or 20 feet through the drain, seeking no less the benefit of the *air* than the moisture which they have there found. One of our most intelligent friends is so impressed with the importance of atmospheric circulation through the soil, that he has just arranged extensive tile brick tunnels beneath his grapery to secure it. The application of the foregoing principles will be considered in our next and subsequent numbers.

Sweet Indian Meal, Hommony or Samp, may always be had as easily as the musty, sour or insipid. Select a richly-flavored seed; give it a full growth by good cultivation, on a good soil, well manured; let it ripen thoroughly on the stalk; husk and store it *on the cob*, in a well-aired granary, and there let it remain till wanted for use. Then shell and grind it—*not too fine*—between sharp flinty stones, set so far apart that they cannot rub; then separate the hulls by sifting, if meal, or by washing, if hommony; boil for two hours in clear, soft water, with salt to season to the taste. With rich milk, or dressed with butter and sugar, or syrup (not molasses), such a dish is as worthy to grace the President's table, as that of any of his fellow farmers in the United States.

SHIPPING INDIAN CORN TO EUROPE.

Great complaint has no doubt been justly made of the meal and corn imported into England and elsewhere from this country. This grain is more liable to heat, mould or sour, than any other; and there has been a characteristic American haste, waste and carelessness, in almost every operation in sending it forward to a market.

Carlyle, in a recent number of Frazier's Magazine, after abusing, in his own thorough Saxon, through every mood and tense, such specimens of this grain and meal as had been sent there on sale, concludes his tirade by the following blunt specimen of dawning truth and its hearty avowal:—

"Well, three days ago I received, direct from the barn of an American friend, as it was stowed there last autumn, a small barrel of Indian corn in the natural state; large ears or cobs of corn merely stript of its loose leaves. On each ear, which is of obelisk shape, about the size of a large thick, truncated carrot, there are, perhaps, about five hundred grains arranged in close order in their eight columns; the color gold yellow, or, in some cases, with a flecker of blood-red. These grains need to be rubbed off, and ground by some rational miller, whose mill-stones are hard enough for the work; that is all the secret of preparing them. And here comes the important point. This grain I now, for the first time, find is *sweet*, among the sweetest; with an excellent rich taste, something like that of nuts; indeed, it seems to me, probably from novelty in part, decidedly sweeter than wheat or any other grain I have ever tasted. So that it would appear that all our experiments hitherto on Indian meal have been vitiated to the heart by a deadly original sin, or fundamental falsity to start with; as if experimenting on Westphalia ham, all the ham hitherto presented us for trial had been in a *rancid* state. The difference between ham and rancid-ham, M. Soyer well knows, is considerable! *This* is the difference, however, this highly considerable one, we have encountered hitherto in all our experiences of Indian meal. Ground by a reasonable miller, who grinds only it, and not his millstones along with it, this grain, I can already promise, will make cleanly, wholesome, and palatable eating; and be fit for the cook's art under all manner of conditions; ready to combine with whatever judicious condiment, and reward well whatever wise treatment he applies to it; and, indeed, on the whole, I should say, a more promising article could not well be submitted to him if his art is really a useful one.

"Practical English enterprise, independent of benevolence, might now find, and will by and

by have to find, in reference to this foreign article of food, an immense development. And as for specially benevolent bodies of men, whose grand text is the 'food prospects,' they, I must declare, are wandering in darkness with broad day beside them, till they teach us to get Indian meal, such as our American cousins get, that we may eat it with thanks to heaven as they do. New food, whole continents of food; and not rancid ham, but the actual sound Westphalia! To this consummation we must come; there is no other harbor of refuge for hungry human population; but all the distressed population fleets and disconsolate Mathusians of the world may ride there; and surely it is great pity the entrance were not cleared a little, and a few buoys set up and soundings taken by competent persons."

We have tried various modes of sending maize across the Atlantic, shelled and ground, both raw and kiln-dried, but seldom has it been shipped *in the cob.* Sound, well-cured corn, stored in a perfectly dry place, on ship-board, and kept in the cob till ready to grind and eat, we believe is the only way of giving to European palates the genuine, aromatic, nutty flavor of our unmatched Indian corn.

DOG DISTEMPER—POTATO ROT.

I SEE several cures for sick dogs in the Agriculturist; I have tried the following in extreme cases, and have succeeded to a miracle. When a weakness across the loins appears as one of the symptoms, it is a sure case—give one teaspoonful of laudanum, and repeat the dose in a few hours unless relief is found from the first.

POTATO ROT.—Do you want a cure for potato rot? Let me give you a sure one. A Mr. Jonathan Ackley, living on Holmes' Bay, at mouth of Machias River, Maine, burnt brush wood around his patch of potatoes, and had perfect potatoes when his neighbors had not enough sound ones left to tell what destroyed their bed-fellows. Yes—*but* one swallow does not make a summer.

Well, here is another. A Mr. Getchell of Middle River, near Machias, was a thriving man, and he burnt bricks while his crops were growing. A good burn he made too, for his field of potatoes around the kiln were entirely free from rot, while all others in the neighborhood were affected by it.

HENRY L. SMITH.

Madisonville, La.

EXPERIMENTS WITH POTATOES.

MR. GRAHAM, of England, tried the following experiments with potatoes last season:—

First. He cut off the stalks when in blossom, and then covered the drill, to see if, as many assert, the yield would be greater than when the stalks were left to grow. The crop, when the tops were cut off, was scarcely as much as the seed!

Second. He cultivated one drill in the ordinary way, and from the stalks of another drill growing alongside he plucked all the blossoms. The difference in yield of the latter over the former was 43 per cent.

Third. His potatoes self-planted were not diseased. This is an experiment, however, that on account of the greater severity of the winters, cannot well be tried in our climate.

Fourth. In accordance with the recommendation of the Belgian government, when any of his potatoes showed symptoms of disease, he cut off the tops and covered the ground a foot deep with earth. But the produce of the potatoes thus treated was as badly diseased as those whose tops were left growing.

WISCONSIN FARMING.

ALTHOUGH I find here and there a few subscribers to your agricultural paper in this state, it is some time since I noticed a correspondent from it; and in the hope that I may awaken a little attention among the more intelligent readers, and induce them to communicate some valuable intelligence from this far off region, rather than with the expectation I shall impart it myself, I am induced to address you.

There is probably no one of our new states that has secured so large a proportion of intelligent and enterprising settlers from the older ones as Wisconsin. The healthfulness and general mildness of the climate, the almost uniform fertility of the soil, the abundance of springs and water courses, the rolling surface, yet absence of mountains, which admits of easy natural drainage without the expense of labor of leveling or surmounting rugged ascents; and then the happy, natural arrangement of interspersing woodland, prairies, and groves, with the facility of access by the great chain of inland lakes from the east and north, and by the Mississippi from the Gulf of Mexico from the south and west—all have conspired to give to this comparatively recent state, a rapidity of growth, an affluence of population, wealth, improvement and intelligence, never surpassed, if ever equalled. Already we have a commercial emporium in Milwaukie, numbering 15,000, and several minor places of 2,000 to 5,000, all supported in the fullest activity in supplying the merchandise and manufactures of the surrounding settlements. Yet, in the spring of '36, less than fourteen years since, I traversed almost the entire length of the state without meeting scarcely one comfortable abode, and several nights I had to camp out on what are now the most thronged thoroughfares, without a shelter to my head, save the canopy of heaven or the bark covering of the Indian wigwam. The whole state did not then contain 6,000 white men; now it has near half a million! Such is the rapidity and luxuriance of western growth. Milwaukie itself, at that time, boasted but one decent house, and that had only one finished room; and grateful indeed did I feel to its polite host, Mr. Juneau, (for a long period previously, an Indian trader at that post, but whose fine and stately form and urbane manners would have graced the court of Napoleon, and has since been fully appreciated as a Post Master and Mayor of that juvenile corporation,) for a seat at his table, and a mattrass, buffalo skins and blankets on the floor of his half-finished warehouse attic. Now how changed! We have 15 or

20 hotels, two or three of which are equal to the best in the Union, and all comfortable and respectable of their class. But it was not of all this, and an infinity more of similar matters, I designed to speak, but of the agricultural developments of the country.

Our first settlements were made in the south and east, where the prairies occupy a large share of the surface, but a small distance remote from the lake shore. From this point, the occupants have pushed northwardly and westwardly, till the Mississippi has been reached, and the Wisconsin and Lake Winnebago have been passed; and far beyond their northern shores, population has clustered, farms have been subdued, and the landscape is dotted with lowing herds, cultivated fields, and rising villages. The emigrants being generally of the more respectable classes, have at once commenced their operations by erecting good buildings, enclosing large areas with substantial fences, and adopting some of the best modern agricultural implements and stock. The result is seen by the immediate return of large crops of wheat, corn, hay and roots; and in large beeves, porkers and dairy products. The most conspicuous of our settlers, those who have either been men of note or are hoping to be, adopt at once the distinctive badge of citizenship, by the occupancy of large and well-cultivated farms. Governors Tallmadge, Dodge and Doty, are each large farmers. The former, for many years your distinguished Senator at Washington, now occupies his domain of a thousand acres at Taycheda, on the fertile shores of Lake Winnebago; Gov. Doty owns and cultivates a large island at its outlet into Fox river; and Gov. Dodge has his rural domicil still farther westward.

Our staple product is wheat, of which we send large quantities to the eastern market, principally through the lakes and the Erie canal, though some finds its way to New Orleans by the way of the Mississippi. Our wheat has an enviable character among the eastern millers, for the large quantity of flour it yields of a superior whiteness and strength. The best wheat districts of the Ohio Reserve, Milan, Sandusky, and other celebrated wheat depôts, have a reputation in no respect superior to our own. One great advantage we have over much of the Illinois wheat-growing region, is, in the almost universal production of winter instead of spring wheat, which they are compelled to substitute for such as winter kills, and to which it is much subject in large portions of the latter state. I will endeavor to collect statistics of our shipments in this one article, and send you hereafter.

Corn we raise in large quantities, but consume it principally at home, in fattening our swine and cattle, and feeding it to our working animals. Small quantities only have been hitherto exported; as, besides the uses first mentioned, we have had a large influx of hungry Germans and other emigrants to feed, who have consumed no small amount of our marketable grain, while they were preparing the means to live themselves, and afford the staff of life to others.

Hay, clover, roots of all kinds, peas, beans, flax, hemp and even tobacco are raised, and can be produced in any quantity, when increased facilities and still more cheapened transportation will justify our sending them to a distant market.

I have used up my paper, and I fear your patience, without having scarcely begun my story of

WISCONSIN FARMING.

Violet Grove, Wis., Nov. 17th, 1849.

CHEAP LAND NEAR NEW YORK.

AT South Amboy, within two hours of this city by steam-boat, which runs three to four times a day, land can be purchased at the very low price of ten dollars per acre. The location is healthy, and commands fine views of the ocean and adjacent country: it is also convenient to sea-bathing. Pleasant sites here for cottages, and how much more healthy and agreeable for our citizens to spend the summer in a place like this, than to be cooped up in the narrow streets of New York.

Delightful roads for walking and driving, sea-bathing, pure air, fresh fruits and vegetables. It is wonderful to us that so many will pass the hot weather, cooped up in the confined atmosphere of the city, when it is so cheap and easy to get into the country. Here, in consequence of the absence of large parks, they have no good opportunity to exercise properly; the consequence is, that all suffer more or less in health.

This sandy land, poor as it looks, is susceptible of being easily improved, and can be made to yield as good crops as any other. We much prefer its cultivation to a stiff clay, and can make its returns quite as profitable. For more particular information on the general management of sandy soil, we would refer to pages 97 and 166 of the first volume of the Agriculturist. We intend to enlarge upon this subject more fully hereafter, particularly in the way of gardens and orchards, and show how easy it is to cultivate fruits and vegetables of the best quality in this kind of soil.

ECONOMICAL MODE OF FEEDING STOCK.

FARMERS who have but few animals, say two or three cows, a yoke of cattle, or a pair of horses, will find it greatly for their interest to cut their corn-stalks, straw, and even hay when it bears a high price. When this is done, put the cut fodder into casks of suitable dimensions, take hot water, to prolong the heat, and salt it at the rate of two quarts to a barrel. All know that brine can be kept hotter longer than fresh water. Pour this upon the cut fodder as fast as possible, in order to prevent the escape of heat, cover the head of the cask close with a blanket, or anything convenient which will keep in the steam, and let it stand half a day or longer, when it will be found tolerably well cooked. Now place it in troughs for the stock; and if you have a little meal or bran to sprinkle over it, your animals will relish the feed so much the better, and it will do them more good. Corn-stalks, straw, and coarse hay, are worth twice as much for food when thus prepared, than if thrown out neither cut nor steamed. We give the above from experience, having been

in the habit of following the practice for years.

Farmers labor diligently during spring, summer, and autumn, to raise and harvest fodder, then allow a large portion to be wasted from sheer negligence. Winter is their leisure time, and they should endeavor, at some extra pains, to economise the food they have worked so hard to procure. Machines for cutting stalks, straw, and hay, have been greatly improved and multiplied within a few years past, and can now be had at low prices. It is economical to possess them, and no farmer should be without at least one on his premises.

BENEFIT OF SUB-SOIL PLOWING FOR CORN.

The first week in May, 1849, I planted a field with corn, the same having been planted the two preceding years with corn without manure. The land was partly a sandy and partly a gravelly loam, and very much impoverished. I plowed it but once, and harrowed it after having thrown over a thin coat of coarse barn yard manure.

The corn was planted in drills three feet apart. A succession of rains followed, in consequence of which, one third or more failed of coming up; this I replanted the last week in May. It proved equally forward with the first planting, which is conclusive evidence to my mind that there is not that great advantage to be derived by early planting which is too often claimed, if the weather subsequently proves favorable. After the corn was four inches high, I run a small plow as near to the rows as could be done without injury, turning the earth from the corn, it being planted in drills. This covered the weeds which were beginning to spring up, and was followed with a small sub-soil plow to the depth of a foot or more, loosening the dirt but not turning it out of the furrow. About a week after this, I took for each acre 800 lbs. compost made up of 200 lbs. Peruvian guano, 200 lbs. bone dust, and 400 lbs. pulverized charcoal. This I sprinkled on each side the row in the furrow, following with a cultivator, which levelled the dirt in the centre and covered the compost. After two weeks I run a double furrow with the small plow (one of your double mould board plows would have saved half the labor), throwing the dirt to the corn. At the same time two men passed through, uncovering and straightening up any plants which needed it, and throwing out the dirt six inches to one foot. Some days after this, the sub-soil plow was run in the last-named furrow to as great a depth as possible, which was followed with the cultivator, leaving the ground nearly level and entirely free from weeds, except immediately round and between the stalks, which were cut up or pulled out by hand with very trifling labor. There was an extreme drought from the last week in June till August, and while the corn of my neighbors was suffering exceedingly, mine was growing from 2 to 2½ inches per day, by measurement, and yielded 144½ bushels ears, sound corn, per acre. I ought to have said the corn was covered by running the cultivator over it.

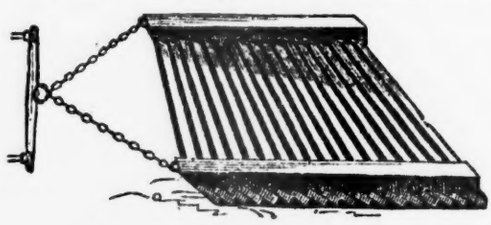
Samuel Allen.

Morristown, N. Jersey.

CLOD CRUSHER.

We find in the London Agriculturist Gazette, a cut, fig. 3, of what is there called the "Cumberland Clod Crusher." We think it might be introduced into use in the United States with good effect, particularly on a stiff clay soil. The writer thus describes it:

It is so easily constructed that any carpenter can make one; nay, so simple is it, that a neighbor of mine made a temporary one of his harrow sledge, that answered on his soil as well as the Crosskill crusher he had already on his farm; and so effective are they for all the purposes of clod crushing, that farmers are laying aside their Crosskills to adopt them. They cost 30*s.* to 40*s.*, according to their size and the quality of the wood employed. Perhaps the best size is six feet square. For this size, two, three, or four horses are used, according to the state and character of the soil, and the weight applied. For ordinary land, the weight of the crusher is enough; if the clods are more stubborn, the driver, to give additional weight, steps upon it and rides at his ease to the end of the field stepping out at the turning, and resuming his station as the horses proceed. Should the land



Clod Crusher.—Fig. 3.

be one mass of large clay clods, he further increases the weight, by adding a few stones. The implement is made of two or three rails of ash or oak, as a frame 6 feet long, and laid parallel to each other, to make the frame 6 feet wide. Each rail being about 8 inches deep, and 4 inches broad, notched at the bottom to receive the cross boards. Across these rails are nailed 18 boards, perhaps 2 inches thick, and so broad as to overlap each other, thus elevating one of their angles 2 inches above the one on which it is laid, and along each of these angles, the whole length, a piece of hoop iron is nailed, to prevent the angles chafing; this being done, the implement is finished. It is dragged by two chains, one from each rail, joined to a swivel; the sloping sides of the boards forwards, the perpendicular sides following. The board next the drawing chains is sloped high up to the top of the frame, to prevent the soil from dragging.

RAZORS AND EDGE TOOLS.

The edge of a finely-set razor or knife appears, to the naked eye, as perfectly smooth, and faultlessly polished. When viewed, however, through a magnifying glass of great power, the edge will appear rough and jagged, like an irregular-set saw. Nature would never leave her work so imperfectly. The more minutely you examine a flower—its petals, stamens, calyx or leaves; the fracture of minerals; the beautiful and harmonious arrangement of any part of the animal

creation, as of a feather, a hair, the skin, &c., the more perfect it will appear. Works of art are but *seeming* perfections—Nature's alone are genuine.

But our object is simply to give the hint, by which its imperfections can be made to subserve utility. In sharpening a razor, draw the edge from the heel to the point; for a knife, carry the blade over the hone from the point toward the heel. Each of these operations will set the rough points, which really constitute the edge, in a direction to catch the beard, wood or other substances, and sever them in the most effectual and speediest manner. The principle is fully illustrated in the form of a mill-saw, which cuts with great rapidity in one direction, but scarcely at all in the other.

In sharpening a knife, when brought to an edge, give it two or three strokes on the hone on both sides, with the back elevated a few degrees, so as to make a stunt edge. This will take off the wire edge, and give it durability, and prevent checking or *nicking*.

In shaving, lather with cold water; this gives hardness, rigidity, or firmness, to the skin, which holds the roots of the beard firmly. But dip the razor in hot water, just before using, or warm it by the fire, or in your hand it will then cut easier.

THE WATER SPANIEL.

Next after the sheep-dog in usefulness to the farmer, we rank the well-bred water spaniel. He is strong, hardy, courageous, active, sagacious, obedient, highly affectionate, and makes an

Water Spaniel.—Fig. 4.

excellent game as well as farm-dog; working in water as readily as upon land. Fig. 4 is a spirited cut, and shows the points advantageously of one of the best of this breed.

The water spaniel varies somewhat in size; but those most highly approved of approach the Newfoundland in height, though they are ordinarily about one-fourth less in weight. The hair is three to four inches in length, and quite curly, especially over the fore parts; the color varies from nearly pure white to jet black; but we have more generally seen them of a buff color, or buff and white, and black and white. The best of the kind we ever possessed came from Ireland, and was jet black. It would hunt any sort of game either on land or in water, and would dive for a stone and bring it up from a depth of ten to twelve feet. A better farm or watch dog, or more attached creature to its master never walked.

SWAMP MUCK, OR PEAT, AS A FERTILIZER.

This substance abounds in almost every section of our country, and is capable of producing the greatest fertility in old worn out soils. Some qualities of it will answer a good purpose if put upon the land just as it is dug, without any mixture of lime or other substance. We witnessed the greatest beneficial effects of muck or peat that we have ever seen, not long since, upon the farm of Mr. James Buckalew, and also upon the farms of Mr. Forman Hendrickson, and Mr. John L. Hendrickson, in New Jersey. The last named gentleman showed us a piece of corn that averages this year sixty-three bushels to the acre. Seven years ago the field where it grew had a

dressing of 12 or 14 loads of muck and one bushel of lime to each load, and has had nothing since. Previous to the dressing of muck, the soil had been quite exhausted. Another New-Jersey farmer, Mr. Ezekiel Coombs, has completely renovated a worn out farm by the use of muck. We call attention to these gentlemen, that all who have this valuable fertilizer upon their farms, may see what has been done by others, and what they can also do themselves.

DWARF PEARS.

Within the last ten years it has been well demonstrated that pears cannot be made to grow and succeed well, except by garden culture. To cultivate in this way for ten or fifteen years before reaping an abundant crop, is an expense beyond the means of the larger portion of those who esteem this delicious fruit.

To avoid this tedious process has long been a desideratum, and nothing has been found to answer the purpose but dwarf pears, or pears worked upon the Quince stock. They can be planted at short distances—8 or 10 feet apart—will grow luxuriantly, and many varieties will bear the second and third year after planting. A gentleman just informs us that one of his neighbors picked the last summer a fine pear from a tree planted in the spring. This not unusually occurs, but however desirable, should not be allowed, as the health of the tree is more or less injured thereby. The crop between the trees can by good management be made to pay the expense of manure and cultivation. We have a pear orchard of some four acres, containing about 1700 trees, ten feet apart. We put upon it the last spring $150 worth of manure, and the following autumn gathered from it 275 bushels of potatoes, about 30 tons of sugar beets, besides a large quantity of turnips and cabbages, and in this instance a large part of the beet seed proved poor and did not vegetate. But it should be borne in mind that no crop should be placed between the trees that does not require constant cultivation, without which no pear orchard can flourish. Any root crop is good for this purpose, but corn, or any grain crop, is inadmissible; we know by experience that it is highly injurious.

In planting the pear or quince, it is well to place the stock entirely below the surface of the ground; in this way it is less liable to be attacked by borers, and as the tree grows, it will also be found to throw out roots from the pear wood which is below the surface. Thus the quince root will bring the tree into bearing immediately, and by the time such a result is desired, the tree will be upon its own root.

The planter, in his glowing visions of future profit, should not, however, calculate with certainty that each of his trees will grow without accident, and will produce him its dozen, or peck, or bushel of fruit. There is, unfortunately, such a thing as blight, and pear trees will often be cut off in a most unaccountable and mysterious manner. The cause of this blight being yet unknown, there has been discovered no remedy, and the only way is to anticipate the loss of one quarter of the trees before they come into full bearing, and to put up with this loss with equanimity when it does occur. A person may escape without the loss of a single tree, but it is most safe to anticipate the worst. Yet with the loss of even one quarter of the trees, it is the best crop which can be raised. It must be a poor tree which at ten years of age will not produce a peck of fruit, and a peck of fine fruit will certainly bring a dollar, when Virgalieu pears were sold in the New York market last fall at six to eight cents each. With 400 such trees on an acre, it can readily be perceived that no other crop can compare with it; and the man who plants a five acre lot for each of his children at its birth, would be able to furnish those children a comfortable living at their majority.

We will now insert the estimate which we have made for our own guidance, premising that every fourth tree in the orchard is on its own root, and that the crop pays for the cultivation, which it may or may not do, according to the skill and management exercised. The estimate is for one acre of land.

430 trees at 50 cts. each, . . .	$215 00
Planting do. 5 " each, ...	21 50
Manure before planting, ...	40 00
107 trees for filling in, in case one fourth of them should happen to be blighted, ...	53 50
Pruning, &c. for ten years, . . .	50 00
Interest on $380 for ten years, . . .	26 60
	$406 60

Proceeds the tenth year.

430 pecks of fruit a $1.	430 00

It thus paying the cost the first year, and leaving a clear profit for subsequent years. Our estimate of the fruit produced, not being made from actual experience, may be incorrect; but we think it much below the probable crop. On the other hand, it should be borne in mind that the trees will be bearing more or less after the third or fourth year, and that the eighth or ninth year may produce as large a crop as the tenth. We have not included this in the estimate; but it can be applied either on the cost of the orchard, or to defray that of cultivation in case the crop should fall short of our anticipations. Such is our opinion of pear culture; but no one should embark in it without being prepared for occasional disappointments from year to year.

Animals should be always kept in a thriving condition.—Do farmers ever reflect that all food and attention consumed by animals, without a corresponding improvement, is so much money thrown away? Every day in the life of a brute should be a day of progression towards maturity, either of working capacity or the shambles. Curtail your stock, sell or even give them away, till you have reduced the number within your ability to *full-feeding*. A prime milking cow, amply fed, housed and cleanly kept, will produce as much milk through the season (winter and summer) as four or half a dozen, miserable brutes half fed; yet the last will consume two or three times the amount of food and attention appropriated by the other.

CONNECTICUT FARMING.

Connecticut to a traveller from the rich prairies of the west, unaccustomed to broken lands, will look like a barren waste made up of rocky ridges, narrow valleys, and small sandy plains; the surface of its hills washed by the rains under two hundred years culture, until the better portion of its soil is removed, and the owners of such farms will be thought slovenly and unthrifty farmers. Yet such is a goodly portion of our State; and it is indeed too true, that our ancestors have cropped their more easily tilled lands, without returning anything to the soil, until large portions of such have become exhausted and some quite worthless. Under such circumstances, their descendants have been obliged to migrate to a new and virgin soil, or restore the exhausted and worn-out land of their native home. Between these alternatives many have chosen the former, and Connecticut's sons are now among the best farmers of Western New York, Pennsylvania, Ohio and Michigan; but a large portion of these descendants resolved upon the latter course, influenced by a love for their good old mother, and determined to renovate her soil, and make her what she once was, a luxuriant, fruitful, and happy mother of a growing family. That they are vigorously carrying these plans into effect, Mr. Robinson might have seen if he had given himself time to look, or if he had sought for information at the right sources, and been able to compare the past with the present, he might have seen among the greater portion of respectable farmers, indications of thrift and signs of improvement, which should have influenced him to have given a different complexion to his "Flight through Connecticut," and in fact he is forced to confess "there is an air of neatness about their dwellings which is commendable, but these belong to mechanics, no farmer dwells there."

The soil of our State is divided into small farms mostly, and the proprietor of each cultivates with his own hands, which with vigorous health is his only wealth; but with these means he is yearly improving that soil so far as he is able to do and support his own family; and although his progress is slow it is certain; and the last twenty years has shown a marked change to those who have had an opportunity to see and judge. Connecticut farmers have learned. that her soil to feed her sons must be fed in return, and no good farmer now thinks of constant cropping, without a regular return to the soil of a liberal supply of the food of plants

I have delayed this communication to collect statistics of this season's crops, in my vicinity, in proof of my assertion, that Mr. Robinson has done us injustice. Ours is an agricultural town, and we have had as large a proportion of exhausted land within our limits as any section of the State. This, where it has been sold at all, has been sold as low as $3 per acre within the last twenty years, and there are portions of this land now, which is worth to cultivate from $40 to $50 per acre; and these are still improving. Our grass lands lying in the vicinity of our main street, produce on the average four tons to the acre, both crops, (we always cut two crops per year,) one field that was actually weighed, produced over five tons to the acre, and there are others which will quite equal that. There were three acres of oats, averaged 86 bushels per acre, one acre of which being limed produced 92 bushels; of corn there have been several pieces measured, some of the results I will state. One single acre produced 136 bushels; one piece of three acres produced 116⅔ bushels per acre, weighing 60 lbs. per bushel. Another piece of six acres, one acre of which was measured, produced 102 bushels, a fair average of the whole. In the same field were three acres of potatoes, which produced something over 600 bushels sound tubers. There were other fields in corn which were estimated to produce more than the last named, but not measured.

We have the pride also to believe that we rear as good horned cattle as any of our sister States. Our matched cattle sell at from three to four years of age, from 125 to 150 dollars per yoke; we can show native cows (which if Mr. Robinson were to see, he would probably cite as examples of slovenly breeding,) from whose milk at grass alone, 2 lbs. butter per day are made; and from a town in our vicinity which is considered as one of the poorest in our State, of only a population of 633, was exhibited at a late neighborhood cattle show, a team of nearly 80 yoke, many of which were worth $100 per yoke. And now, Messrs. Editors, from these facts which I am able to substantiate, is Connecticut farming at the low ebb your tourist represents? or will he say that this is not a fair sample of the State? But this shall not avail him. We can prove that in other parts of the State, crops of greater value have been raised than any I have stated, particularly wheat and tobacco, which we do not grow in this place. I could multiply facts to prove that the art of farming is improving, facts that would go to show that by the improvements in agriculture, Connecticut will probably sustain a much larger population than she now has. But I have already extended my communication too far: my apology is the unwarranted attack upon us.

A Connecticut Farmer.

Farmington, Nov. 5th, 1849.

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Our respected correspondent above, will see that we have somewhat abbreviated his communication; but we are certain he will be satisfied with the liberty we have taken, when he comes to read the December number of our paper, and finds that Mr. Robinson has commenced *reversing* the picture. He will have a good deal to say on the *bright side* of Connecticut farming before the year is up. As a further apology, we beg also to inform him, that Mr. Robinson is quite familiar with old Connecticut, for this is his native State; and moreover he was brought up a farmer, and so continued till he was about twenty years old, when he emigrated to the West. Since this, he has visited Connecticut repeatedly, traversing the State in various directions. As soon as this meets Mr. R's. eye, we presume our correspondent will hear from him in answer,

probably in our March number, as he is a thousand miles South by this time. He is a good-natured man, and wrote the "Flight" more out of sport than anything else; and yet he contends it was all true so far as he went, and cannot be gainsayed.

PLOWING THE PLAIN LANDS OF LONG ISLAND.

Dr. Peck states, that with the Worcester Eagle D plow, with three yoke of cattle attached, he has succeeded in plowing these lands well, immediately after the wood was cut off, and without the previous operation of grubbing. This he has done at an expense of $3 per acre, while the old grubbing process alone would have cost from $12 to $16 per acre. The trees and bushes cut off previous to plowing, stood very thick on the land; and their roots when he put the plow in were not only of ordinary size, but green and tough. Many farmers came from his immediate neighborhood to see his plowing, having little faith in removing scrub oak and pine stumps and roots in this summary way. We have only to add, that the manufacturers of these plows, are now at work on a model which will be decidedly more efficient than the one used by Dr. Peck. As soon as some are finished, they will be sent to our warehouse, where we shall be glad to have the Long Island farmers, and any others interested in such matters, call and look at them.

AN EXPERIMENT WITH HOGS.

John C. Stevens, 30 years ago.—Extract from his Journal.—"Sept. 30, 1819. Put up 30 hogs—15 barrows and 15 sows, in separate pens. The barrows weighed—250, 250, 196, 196, 175, 171, 171, 168, 163, 161, 141, 140, 114, 112; average, 170 lbs. The sows weighed—168, 158, 131, 126, 122, 119, 119, 117, 115, 113, 109, 105, 105, 101, 80; average, 119 lbs.

Nov. 4. The largest barrow weighed 334 lbs.—gain in 43 days, 84 lbs.

Nov. 10. Butchered hogs—not fed since noon yesterday. Thirteen of the fifteen barrows weighed after killed and before dressed—200, 225, 228, 259, 287, 160, 194, 226, 252, 317, 223, 203, 168, lbs.; average, 226 lbs. and a fraction. Dressed and weighed again, averaged 165 lbs., less a fraction. Average loss in dressing, 62 lbs.

Thirteen of the fifteen sows weighed before dressed—152½, 170, 186, 169, 189, 194, 224, 142 233, 175, 174, 161, 169 lbs.; average, 180 lbs., less a fraction. When dressed, averaged 135 lbs. Average loss, 45 lbs., less a fraction, which is a less loss than upon the barrows.

The hogs were fatted upon pumpkins and potatoes, boiled, and some corn.

Corn from the Sandy Plains of Long Island.—It is well known to many of our readers, that thousands of acres of the sandy land of the south side of Long Island, have never yet been cultivated. They have hitherto been supposed to be too poor for this purpose, and have consequently been left ever since the settlement of the country, to produce nothing but stunted pines and scrub oaks. Dr. Peck, of Lake Road Station, has just sent us a fine sample of corn raised on this kind of land the past summer, as a sample of what can be produced there. He says it was late planted and imperfectly tilled. The ears of this sample are from 7½ to 10½ inches long, 2 inches diameter at the butt, and the cob is very perfectly filled with large, fine grains. It is of the white variety, and we should call it a handsome sample of corn, even if produced from a highly fertile soil.

GREAT AMOUNT OF INDIAN CORN FODDER GROWN IN ENGLAND.

W. Hants states that ninety tons of Indian cornstalks, weighed green and fresh cut, were taken from a single acre in England last year. If this be so, it is more than double the weight of stalks we ever knew taken from an acre in America.

Perhaps there is some mistake in this statement, and perhaps the greater humidity of the English climate, and the stalk being well saturated with rain at the time of cutting, makes the difference in weight of acreable produce between the two countries.

Mr. H. urgently recommends increased cultivation of Indian corn throughout the south of England expressly for soiling, as the green stalks are highly relished by all stock there, pigs excepted. This agrees with our own opinions often expressed to the English farmers when travelling there eight years ago. We told them that they could not calculate upon the ripening of the grain in their cool, moist summer climate, but they might be certain of a great and valuable growth of stalks, which would be found equal to tares, rye, clover, lucern, &c., cut green and fed to their cattle.

SOUTH OREGON CORN.

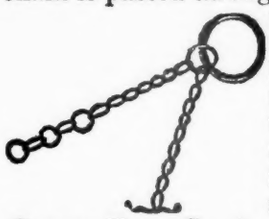
Permit me to give you for publication the origin and cultivation of a new variety of Indian corn, obtained by myself three years past from the State of Maryland—and successfully cultivated. This corn was introduced into the State in 1839, by Gen. Harrison, from the southern part of Oregon and cultivated successfully, and decided to be 30 per cent. superior to any before cultivated by himself. For myself, I can safely say, in some cases, I have nearly or quite doubled my crops on the same land, over any of the older varieties of corn. Its adaptation to thick planting, and prolific bearing, I consider great acquisitions to the corn crop. The color is orange-yellow; ears, long and large; grains from half to three-quarters of an inch in length, plump and closely set on a small red cob; sixteen to twenty-four rows to the ear; few or no barren stalks. It ripens early, for this climate, and I think would be a great acquisition to the corn crops of the north. It is known as South-Oregon corn. A. G. Moody.

Smithfield, Isle of Wight, Co., Va.

To Take the Frost out of Roots.—When potatoes or other roots are frozen, soak them in cold water till the frost is all drawn out, and they will be nearly as good as before frost bitten.

CATTLE-TIE.

FIG. 5 is a chain for tying up cattle in their stalls. The large ring goes over a stationary round post set up by the manger, and the chain is fastened to the horns or around the neck. The hook at the end of the lower length of the chain is passed through either of the rings in the upper length, to suit the size at the base of the horns. It may be thought that this chain wears off the hair on the head of the animal, but this is not the fact. It is the neatest and most secure fastening in use, and at the same time the most comfortable; as the animal slips the chain up and down the stationary post, by the large ring, as it wishes to move its head in feeding or getting up and lying down; it can also turn and lick itself when thus fastened. The great superiority of a chain is its durability. It lasts an indefinite length of time, and is much stronger and more convenient to handle than a rope. Price from 37 to 50 cents.



CATTLE-TIE.—FIG. 5.

MASSACHUSETTS' SWAMP DRAINING.

THE system of swamp-draining in this state, may, in part, perhaps, be illustrated by my own experience, and I therefore proceed to detail the operation with a large swamp I inherited, with the hill-land that surrounds it.

The swamps in this and all other States, are formed in various ways; either by a rivulet sluggishly meandering through low land, which has not an outlet sufficiently deep to drain it; it may be supplied by springs with more water than escapes rapidly; it may be entirely supplied by rains, so completely shut in by hills, as to afford no outlet; or, lastly, it may be inundated by the salt water at high tide. Each of these require a treatment somewhat unlike the other.

My own swamp combined the two first conditions. It was a low quaking bog, of about ten acres and three-fourths, into which a small rivulet from an adjoining hill came dancing and tumbling along; but, when once at that point, seemed so much in love with the alders, the brakes, the cat-tails, and the long coarse reeds and grasses which it found there in profusion, that it seemed in no hurry to get away; and when, at last, like a truant loiterer, it came under the eye of its master again, it slunk away silent and ashamed, under cover of huge clusters of dwarf willows and water-beech. Besides this rivulet, which was sometimes dry, in midsummer or severe dry winters, I noticed the lower edges of the rim surrounding the swamp gave evidence of springs, which found an egress in the bog. I had observed, too, that when frozen in winter, that in several places the ice gave way to what we call air-holes, which was conclusive proof to me that there were springs under them. You may judge that I considered this a pretty formidable undertaking; but having heard of several similar achievements, though on a smaller scale, I determined on undertaking this.

My first operation was to commence a ditch at a point, about 35 rods in a direct line from the outlet of the swamp, where the rivulet made its first descent, in a short rapid having five feet fall. The excavation was through an alluvial soil, and was five feet deep, four feet on the bottom, and twelve to fifteen on the surface, according to the undulations. This was carried direct to the swamp, and the earth, most of which I scraped out with an ox-shovel, (by which a man and team will do the work of six or eight Irishmen,) was moved directly to the bed of the rivulet; and, although this meandered about in so many directions as to run three times the length of my ditch between the same points, yet it was so much narrower than the latter, that I had dirt enough to fill it to a level with the field. I did not then expect to derive any other benefit from this reclaimed land than to make the little jutting capes formed by the sinuosities of the streamlet available for the plow, having always had to lose a full acre and three-fourths of worthless sod, when I broke up the other part of the field. But you shall see I soon made this the best part of it.

I continued the ditch of the same depth and width, but at a slight angle from that outside or below the swamp, so as to go direct to the entrance of the stream. This ditch, owing to some irregularity in the shape of the swamp, was about 40 rods long. I had completed the outside ditch in the spring, and waited till the inlet was nearly dry in summer, when I found a considerable part of the water had drained off. I should have before said, that having meditated the invasion of the swamp the preceding winter, I had taken the precaution to cut off the largest alders on the proposed route of the ditch. This was all the clearing I had done, and the roots were removed, as we came to them, by cutting off in a line with either side of the excavation, and undermining, and dragging out all the others.

I had three modes of getting rid of the earth. The first was by throwing it into some tolerably deep holes near the excavation; the second was by a narrow tumbril running on the bottom of the excavation for a short distance, then up a slight depression in the bank, from which I had convenient access to the new surface of the recently-filled stream, and by this top-dressing I made the best land in the meadow. The balance of the swamp dirt was thrown upon the bank. With a sledge, made something like a large stone-boat, with sides, and a head and tail piece, and the bottom quite rounding, to draw easily, I removed all this earth the following winter, after it had thoroughly drained, and when the ground was frozen. It formed an excellent bedding for my cattle-yard, sheep-fold, and pig-pens, besides affording more than I could conveniently use for several compost heaps. Some of these were made with quick lime, some with butchers' offal, and a large one from a livery-stable, and all of which I found most valuable manures, as the swamp muck used for this purpose was mostly peat or rich alluvion. A small

part of the bottom of the ditch only being hardpan.

I ran a somewhat irregnlar ditch, shallower and very much narrower than the main one, around or near the outer edge of the swamp, disposing of the excavated earth in the same manner as the former. This last cut off all the water supplied by the springs, except two larger ones near the centre, which I carried off by digging a short narrow ditch from thence to the main one.

My swamp was thus completely drained; and although I had expended considerable money in the operation, I did not estimate it to have *cost* me a penny. The filling up and making available the waste land of the meadow, the peat and rich mud for the muck heaps, and the roots and small stuff cut off (where fuel is very high), I deem an ample compensation for the cost.

The following autumn, I engaged a gang of very worthy Scotchmen, to dig out and level as much of the swamp as they chose, beginning at one end and working towards the other, for which their only compensation was the fuel they obtained in the roots, as I reserved the upper part for my own use. So well did they make out with their job, that they begged I would defer clearing off the remainder (they had done about half of it) till the next spring, that they might be able to finish it. Finding I had enough to commence my experiments with, I readily consented, and the following season they completed it.

I threw two or three light bridges over the ditches to make them accessible, and before the fall rains set in, and when the swamp was driest, accompanied by a stout willing pair of oxen and a large sward D plow, I marched on to my newly-acquired territory with the stride of a conqueror, flourishing a long ox goad, rather to direct than to urge my team, for I always train them to mind my words and motions rather than my blows. My plow had the dial clevis, by the use of which I could plow close to the banks of the ditch, and allow the team to walk on the partially firm or sodded earth, and avoid stepping in the soft newly-turned furrows. The strong and sharp lock-coulter cut through the tufts of bog-grass and brakes, besides cutting up many of the extremities of long roots, the larger portions of which had been dug out for fuel. These I subsequently dragged together and burnt, with such hommocks as were not needed to fill the holes, and the ashes were spread over what had *ceased to be a swamp, and had now become a field!*

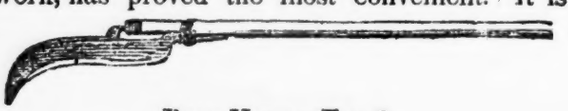
I then drew on about 50 bushels of unslacked lime to the acre, and spread it, then slightly harrowed it in. In the winter, I dug from an adjoining hill, sand and fine gravel, which I spread evenly over the frozen surface, about two inches deep, and followed this with a top dressing of 30 bushels of leached ashes, and 20 large sled-loads of barnyard manure to the acre.

The ground was so light the following spring that it did not need plowing. I harrowed it with a heavily weighted long-toothed harrow, then sowed two bushels of oats, one peck of Timothy, and two of herds grass per acre, on one-half; and furrowed the remainder for corn and potatoes The season was quite dry, but I found a part of my crops suffered from some minor springs I had not discovered, but which subsequent ditching remedied. On the part of the field not thus affected, I had large crops. As nearly as I could estimate, this piece yielded at the rate of 70 bushels oats, 65 of corn, and 220 bushels of potatoes to the acre. The grass yielded the following season, could not have been less than two tons at the first, and one at the second cutting; which, at $12 per ton, the price it then bore, produced me a net value of $30 for one season, after paying for cutting and curing. I put the remainder of the land into oats and grass, which has done equally well ever since; with the aid of a few narrow but deep ditches where necessary, and an occasional top-dressing of gravel, ashes, and stable-manure. After deducting the full cost of this top-dressing, I consider my reclaimed swamp has yielded me a net profit equal to the interest on $300 per acre, a sum I should promptly refuse if offered for my old swamp.

I attribute my great success to the deep and thorough ditching, which effectually drains the land; to the lime, which warms it, and converts the inert vegetable matter into food for the crops; the sand and gravel, which furnish the silex for their frame-work (ashes); and the manure, which both warms the soil and yields food for the plants. The deep bed of vegetable mold, incorporated in a bed of fine alluvial earth, which ages have been adding to it from the neighboring hills, will continue to remain a bed of almost perennial fertility. This will suffice for one specimen of Massachusetts swamp draining.

AN OLD BAY STATE FARMER.

BUSH HOOK.—This implement is made of various forms, but that of fig. 6, for general work, has proved the most convenient. It is



BUSH HOOK.—FIG. 6.

used for underbrushing in the forest as well as for cutting bushes and briars in open fields. We much prefer it to the short scythe or axe for the above purposes, more especially when the brush is rather large. Price $1 without, or $1 50 with handle.

QUANTITY OF SEED WHEAT PER ACRE.

IN a ramble recently among the farmers of the State of Delaware, we find that the most usual quantity sown by the drill, is five pecks to the acre, but some contend that it is not enough, and find their account in sowing two bushels. The average crops of well-improved limed land in Newcastle county, is twenty bushels per acre. Probably no part of the United States can show as great improvement in worn-out farms, as in the above county. Lime has been the great cause of the fertility now to be seen there. Guano of late has also been extensively and very advantageously used. To these may added the very great improvements made in the plow, and

the general disposition of farmers to use better tools.

Hussey's Reaping Machines we found extensively used in Delaware; and no country, except the prairies, can be better suited to the working of drilling and reaping machines, for it is very level, and free from stones; the soil, also, is quite friable, and easily worked over a great portion of the state.

GEORGIA FARMING.

I AM greatly pleased with the advice to southern planters, and with Mr. Robinson's letters; and glad that he gives no quarter to some of the Yankee farmers, as well as to us farther south. It will do both good. Georgia is trying to do better; and if there were no more new worlds of fresh land to go to, her people would begin to make her blossom as the rose. As it is, her march is onward. Look out for the day when the south will spin and weave up so much cotton that John Bull can no more say for its price, "thus far and no further."

Our cotton dealers now begin to believe in a very short crop—the fine fall for picking out, good roads and fair prices have accelerated its coming to market. Two millions is their fullest estimate. How sincerely I wish it could never exceed that amount; for, as things have heretofore been, cotton raisers have been "hewers of wood and drawers of water" for other parts of the world. But I trust a better day is dawning for us, when the capitalists of your section will know what to do with cheaper water power, cheaper labor, (white, too), cheaper living, and what is above all, the raw cotton at their very doors, with cheap railroads to get to the shipping; and who then can head them? Can old England? Can New England? Our trees are full of green leaves yet, and thousands of blooming flowers; and while I write we need no fire, even in the early morning. Please let me hear from you about the gutta percha. B. V. I.

THE GROWING WHEAT CROP.—Mr. Robinson writes us from Delaware, Nov. 25th, that he never saw the wheat crop so universally good as it is this season wherever he has travelled. Some fields in Delaware have been injured by the fly, but the weather is so very favorable that the crop is recovering.

Drilling Wheat.—Mr. Robinson also says, that a greater proportion of the wheat in Delaware is sown by drill machines than in any other state; and it is the general opinion that it increases the crop at least *ten per cent.*, and saves *twenty per cent.* of seed.

SAVE YOUR MANURE.—What are you doing to save your manure—the food of your next season's crops? Are you allowing it to be dropped in the road, the commons, or on declivities where the fresh rains will wash it beyond reach? Are you subjecting it to drainage from the eave troughs, or evaporation from sun and wind? or are you carefully housing it? or composting it in a tight, basin-shaped yard for future use? We venture the assertion, that there are in these United States ten farmers who waste $50 annually in manure, where there is one who pays a a dollar for an agricultural paper, which would teach him how to save it. Yet the dollar *must* be saved, while the $50 are wasted without a regret.

WIRE FENCES.

No one who values his shrubs and flowers on a lawn, where alone they ought to be, would rest a week without these effective, but almost invisible fences. Our lawn occupies some eight acres; but the most valuable shrubs and evergreens are upon two acres near the house. Now it is well known that cattle will go over or through a fine evergreen, with the same object that swine will rub against a post. To this fact our broken evergreens will bear abundant testimony. To save these, and at the same time to pasture the rest of the lawn, we procured annealed wire of Nos. 9 and 6, placed the posts 100 feet apart, using occasionally a tree for a post, and passed through these four strands of wire. At one end of the whole line a strong post was placed firmly in the ground, and the wire fastened to it. At the other end of the line a similar post was placed, the strands of wire passed through holes in it and the end of each strand, fastened in a smali cylindrical piece of iron about an inch in diameter. One end of this iron being squared and a wrench applied to it; the wire was without difficulty drawn perfectly tight. This cost some two and a half dollars per 100 feet, and can scarcely be seen at 50 yards distance. We caused it to be painted *red*, and the first day three *white* cows were let in it; they came out with their necks and breasts striped with *red*, giving clear evidence that they had tested its strength. We fully believe that no animal will break through it. We have been amused to see the way in which our cattle after testing its strength, would stand off and gaze at it, as if in utter astonishment and bewilderment that so insignificant looking a barrier should be able to withstand all their efforts to break through it.

For cheapness, no fence—scarcely even the crooked ones of Virginia—can equal it; and for beauty, its superiority is evident. What a beautiful sight would a cleared farm of several hundred acres present, if fenced in this way, and with a fine group of trees to every two or three acres. The passer by would seldom detect the wire fence, and would fancy it one large lawn, whose owner was a man of true taste. We think if made entirely of No. 6 wire it would be better, although the cost of it would thus be somewhat increased.

IMPORTATION OF SAXONY SHEEP.—By the ship Louisiana, arrived here in November last, Mr. D. W. Catlin of this city, and Mr. C. B. Smith of Litchfield county, Connecticut, imported 4 Saxony bucks and 8 ewes. They were selected for them by Baron de Spreck near Leipsic, and are of nearly the same character as those we have before noticed as being imported at different times by Mr. Taintor. Their size and fineness are

extraordinary, and they cannot but make a most valuable cross on the Saxon sheep of this country. They were attended by a German shepherd and a very fine sheep dog.

POULTRY AND EGGS.

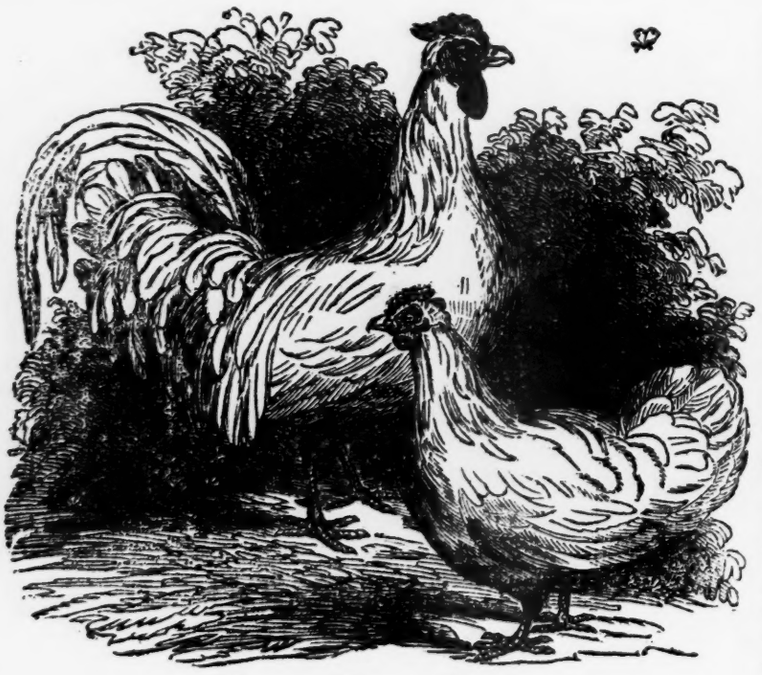
Few persons are aware of the large quantities of poultry and eggs that enter into human consumption. The statistics of the United States for 1839, give a total of $12,000,000 worth of poultry then in this country, an amount, we have no doubt far below its actual value at that time.

The sales of poultry alone in the city of Boston last year, it is said, exceeded $1,000,000, and this too with a population, including its dependencies, scarcely over 150,000. From the best information we can obtain of the poulterers of New York, we find that this city and its dependencies consume a still greater amount in proportion to its inhabitants. This would make over $3,000,000 annually. Philadelphia probably consumes less in proportion, as she does not maintain so many hotels and eating-houses in proportion to its population as New York, neither does anything like the number of passenger-ships and steamers sail from her port. Baltimore, New Orleans, and other southern cities are better supplied with wild geese, ducks, turkeys, and other game than the northern cities, hence a less consumption of poultry. If we assume less than one-third the Boston amount as the average money value of poultry and eggs consumed throughout the United States, we shall find the sum will reach about $45,000,000 a year.

France consumes over 8,000,000,000, and Paris about 140,000,000 eggs per annum. M'Culloch states the quantity imported into England, previous to 1840, from France alone, as exceeding 60,000,000 a year; and M'Queen, at near 70,000,000. Paris consumes of chickens, turkeys, pigeons, partridges, geese, ducks, rabbits, &c., about 4,000,000 per annum.

This enormous consumption of poultry, and its products, shows conclusively its money value, and that it is not a matter of indifference whether we have hens that will lay two dozen eggs a year, or six, eight, or ten dozen; nor whether birds, eating a quart, a gallon, or a peck of grain to rear and fatten them, will weigh a pound and a half, or four, six, or eight pounds. Economy in the management, and skill in the selection and breeding of poultry, is just as much an object of attention for the amount involved, as the improvement of cattle, horses, sheep or swine.

In no other department of the animal creation can a fine taste be so economically indulged, as in rearing choice or fancy poultry. There is so great a variety, such innumerable patterns of form, color and style, and each combined with varying excellence, that there is almost an infinity of room for the indulgence of a breeder's skill; and to none possessed of a fine or cultivated rural taste, is the exhibition of this skill indifferent, or unattended with a genuine, hearty, home-bred delight.



Dorking Fowls.—Fig. 7.

There is one development of this fancy, however, to which we seriously object, which is shown in the excessive size of the barnyard fowl. Some of these, as the Cochin-China, the Shanghae, the Malay, the Java, the Bucks County, and others, are so large and unwieldy as to be justly obnoxious to the charge of *coarseness*, which can never be reconciled either with elegance, or, what is highly important to the smaller farmer, *profit*. Such large birds are only tolerable for the table when nearly full grown and thoroughly well fattened, or caponised; and the latter condition, however desirable, and easily attained by a little attention and skill, is yet hardly introduced, and seldom practiced in this country. The Dorking is the largest barndoor fowl that should be tolerated; and this is a bird, when well bred, so finely proportioned, and has for so long a time been reared for its choice table qualities, that its size, though frequently large, is seldom objectionable. Their meat is lean, tender, and finely marbled. Most other large fowls lay the fat on in big lumps over different parts of the body, thus leaving the meat dry and tough, or flabby and tasteless.

Fig. 7 will give the reader a good idea of a fine, short-legged, heavy-bodied pair of Dorkings, belonging to a friend of ours in this vicinity; but we must confess we rather prefer the group sketched by Mr. Rotch, which appeared at page 112 of our second volume. For a full account of this breed of fowls, we refer to page 204 of our fourth volume, and to a work now in press, by Mr. Saxton, called the American Poultry Yard.

TURKIES IN TENNESSEE.

You have no idea at the north of the immense number of turkies raised by us in this quarter, and sent to the towns south of us for consumption. Only imagine a *small* flock of gobblers, amounting to seven hundred and thirty-one by actual count, which I saw passing my house the other day. They were driven along the high road by two men and three boys, and were on their way to Nashville, where they would be cooped and put on board steamboat for the New-Orleans market. And this, remember, is *only one* of a large number of flocks which we annually export. Now, sirs, what do you think of that? Don't the bare thought of the thing fairly make your mouths water for the great fat gobblers of Tennessee, to furnish forth your Thanksgiving and Christmas dinner-tables?

Raising turkies here is a great and peculiar business among our small farmers—and large ones too, as to that matter, sometimes—a full account of which I intend to give you one of these days, when I get time to scratch it out. In general, however, I can now say, that we usually let them steal their nests, for we find they bring out larger and stronger broods for it. When the young are discovered, we bring them home to a friendly wood, high and close fenced in near the house, and then feed them with coarse Indian meal pudding, allowing them to find shelter as they can within the large wooded enclosure. As soon as the young ones get stout enough, they wander round the plantation in search of grubs, grasshoppers, and other *varmint*, which they pick up by the million—fattening themselves, and greatly benefitting the crops of the planters. In fact, although they partially destroy some of the grass and grain crops on the plantation, we have come to the conclusion that the grasshoppers, &c., would beat them at this, so we let the turkies run, and put up with our losses in this way as best we can. In the fall, when mast is plenty, they get very fat on that; but if this crop be short, we are then obliged to add corn till they are fattened for the market, and then they are marched off as above for the South.

The turkies, young and old, have to contend with many enemies, such as the hawk, owl, fox, polecat, mink, and weasel; but to destroy these is great *sport* for the boys, and teaches them how to handle fire-arms; and will make good soldiers of them for the defence of their country if wanted hereafter; which heaven forbid may be the case, for I don't believe in one man killing another to settle a paltry dispute.

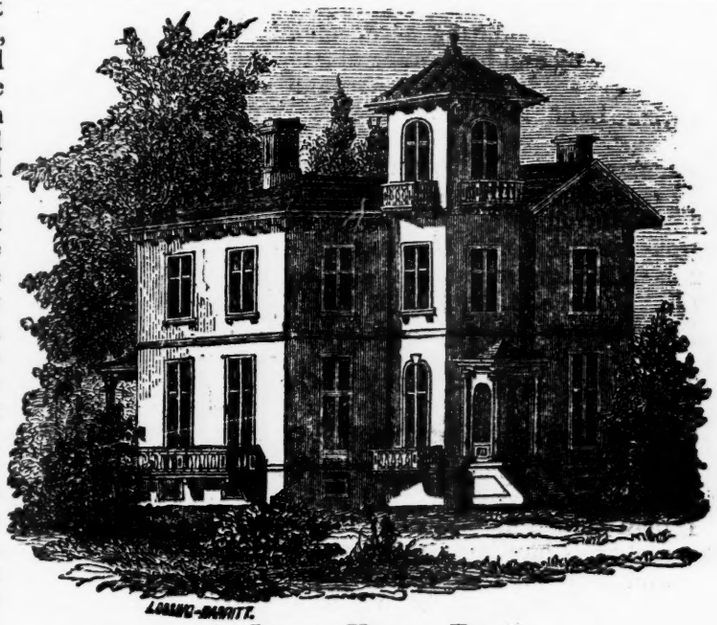
E. G. YANCEY.

GRATIFYING PREMIUMS.—For several years preceding 1848, we took the silver medals, at the American Institute, for exhibiting the best and greatest variety of Agricultural Implements; also, various medals and diplomas for the best single implements. At the exhibition of 1848, the Institute created a *Gold Medal* expressly for us; and the past year, 1849, they created another *Gold Medal* expressly for us, besides awarding us various premiums of different value. We never alluded to this subject before, nor should we now, except as a matter of justice to ourselves, and to show the public that our manufactures and establishment are highly appreciated at home as well as abroad.

AN ITALIAN VILLA.

FOR the Northern states of America, we think the Italian style of architecture for villas and gentlemen's country houses, one of the most appropriate, elegant and convenient that can be adopted. For this reason, we are glad to see them on the increase in our country, more especially in the suburbs of towns and villages.

This style is founded upon the Roman, and was perfected during the thirteenth, fourteenth and fifteenth centuries. Its massive walls, sheltering porch, cool shady verandas, arcades, round arched windows, airy balconies, projecting roof, ornamental chimnies, and bold campanile or tower, rising to a lofty height, combine to make buildings in this style among the most imposing and agreeable ever erected. And then, looking from the exterior into the interior, every thing seems susceptible of being made so comfortable, elegant and even luxurious, that the style wins upon one's heart, and we cannot but wish it much more general than we now find it.



AN ITALIAN VILLA.—FIG. 8.

Houses in the Italian style are more appropriately placed up the side or on top of a hill, and should be flanked with one or more terraces. These may be adorned with vases, statues and fountains. The trees around should be of a loftier character than those which surround any other orders of architecture, save, perhaps, that of the pointed or castellated gothic.

We give no ground plan of this house; all we think necessary for our readers is an exterior

for their guide; the interior each one would prefer arranging to suit his own taste or convenience.

To some, much of the above may seem out of place, and over fine talk and show for farmers. But why so? Thousands of them in our happy country, we rejoice to say, can afford a handsome house and beautiful grounds; then why should they not possess and enjoy them when this is the case? We really do not know who has a better right than the followers of that noble and independant occupation—tilling the soil. Is the farmer to be a dull, unimprovable machine, or a mean clod-hopper from generation to generation, and all the days of his life?

WHAT DOES IT COST TO GROW AN ACRE OF POTATOES?

We have taken some pains to get estimates from practical men in different sections of the country, and here are some of the results. The labor and seed rated at customary prices.

Forman Hendrickson, near Allentown, N. J., estimates the labor of preparing the ground, hauling manure, cutting seed, planting, cultivating, digging and harvesting at $15, and seven bushels of seed, $3 50. Average crop, 130 bushels. Land loamy, made rich by peat and lime.

Thomas Hancocks, farmer, near Burlington, N. J., estimates as follows:—

7 bushels cut seed,	$3 50
1 day, with 2 horses plowing,	2 00
2 days hauling manure,	4 00
1 day 2 men and boy and team planting,	3 00
½ day harrowing, 2 half days plowing, and 1 day hoeing,	3 75
3 days digging and 2 days covering,	3 75
Crop 200 bushels. Land sandy loam.	$20 00

Benjamin Cooper's estimate at Camden, N. J.:—

1 man and 2 horses plowing, 2 men and carts hauling manure, and 1 man and boy cutting and dropping, in every third furrow, the manure spread and plowed in 1 day,	$5 25
½ day harrowing, and 1 day cultivating	3 00
2 days hoeing,	1 50
1-10th of crop for digging,	7 50
2 men and team 1 day to put crop in cellar,	3 00
20 bushels seed,	10 00
Crop 150 bushels. Land sandy. Rent of land worth $6 an acre.	$30 25

Estimate at Chester, Penn.:—

15 bushel seed at 62½,	$9 37½
1 day plowing,	2 00
Hauling 30 loads manure,	2 50
2 days' work spreading ditto,	1 50
4 " cutting seed and planting,	3 00
1 " and team harrowing and cultivating,	2 00
6 men and team digging and securing,	5 75
Crop 150 to 200 bushels. Land clayey.	$26 12½

Estimate of Wm. Webb, Wilmington, Del.:—

1 day fall plowing,	$1 50
20 loads stable manure and 20 loads night soil, hauling,	7 50
1 day spring plowing,	1 50
Furrowing or working drills,	25
1 day cutting seed,	75
2 " planting,	1 50
Ridging and rolling,	50
Harrowing, cultivating, and hoeing,	1 25
14 bushels seed, at 50c.,	7 00
Digging 230 bushels, at 40c.,	9 20
	$30 95

Estimate in Sussex County, Del.:—

15 bushels seed, at 37½c.,	$5 62½
Half day plowing, with 1 horse,	62½
Hauling sand on swamp land, 2 men and yoke of oxen, two days,	3 25
4 days' work planting,	2 00
Harrowing, cultivating and hoeing,	2 25
Digging, by partly plowing out and securing,	3 50
	$17 25

Crop 200 bushels to acre.

CEDAR-BRUSH FENCE.

This is quite a common fence in Virginia, and is occasionally seen in New Jersey and Delaware. If well built, it is a good and durable fence. It is most usually made in this way: first, throw up a ridge of earth about a foot above the level, and in this drive stakes on a line two to three feet apart, three and a half to four feet high, and then wattle in the cedar limbs, beating them down with a maul as compactly as possible. This fence will last good as long as the stakes endure. Some leave the stakes about a foot above the fence at first, and drive them down as they decay, adding more brush at the same time, and thus the fence will last fifteen or twenty years, with less repairs than a common rail fence.

Keep your Stables Clean.—Cleanliness in the stables and yards is as essential to the health, comfort and thrift of your stock as to yourselves, children and servants. Standing in cold muddy yards, and lying down in the filth of stables, especially during severe weather, is a direct loss of food and condition. If dry and warm in cold weather, animals will thrive better on one half their accustomed food, than with all, if these conditions are neglected.

Consumption of Cotton in the United States.—This is estimated at not less than 650,000 bales the past year, 500,000 of which were consumed in the eastern states, and the balance at the south and west. This will not seem at all incredible, when it is known that there are upwards of 250 cotton mills already in operation south of Mason and Dixon's line.

MR. ROBINSON'S TOUR.—No. 12.

Estates of the Messrs. Burgwin.—About three miles below the ferry at Halifax, N. C., on the east side of the Roanoke, I entered the Burgwin estates, formerly owned by the late Thomas Pollock, Esq., of Edenton, and only for a few years past by the present proprietors, Mr. Burgwin, senior, and his sons, T. Pollock Burgwin and Henry K. Burgwin.

It was just before sundown, on the 13th of May, when I crossed the ferry, after a long day's drive, which I was prompted to do by the fact that the river and clouds both threatened a flood that might detain me several days, which I proposed to spend beneath the hospitable roof of an intelligent North Carolina planter, rather than in a dull town. So taking such directions as a negro only can give a stranger, I commenced a voyage of discovery through two or three intervening plantations, and was very near becoming entangled with blind roads and back water, already overflowing and cutting off communication, with darkness and a thunder-storm threatening, when I discovered a carriage approaching, which I found to contain a handsome, intelligent-looking gentleman, with piercing black eyes, and black hair just beginning to show a few silvery streaks. No sooner had I inquired if that was Mr. Burgwin, and announced my name, than he leaped from his own, and approached my carriage to welcome me most heartily as an old acquaintance, though this was our first meeting. Sending forward the carriage upon the errand of mercy that brought him out, which was to carry consolation and mercy to a sick servant, he took a seat with me and drove to the "Cottage," the residence of Mr. T. Pollock Burgwin, whom I had just met, and of his father when not at his place on the Trent. Although I missed the much-loved pleasure of female society, we managed to pass the time rapidly along somewhat beyond midnight, conversing exclusively upon the subject of improving and rendering fertile the worn-out lands of North Carolina and Virginia. Upon this subject Mr. B. is an enthusiast. He has been an extensive traveller, and has visited some of the best cultivated farms of the northern states; and when he came into possession of his property here in 1840, instead of leaving it to be utterly worn out by overseers, who never learned any other art of tillage than cutting down and burning up timber, planting cotton, and wearing out land,—which is then "turned out" to grow up again while they cut down more,—he determined to apply the knowledge he had gained from reading and travelling, and devote all the energies of his strong mind to an effort to change that old, ruinous system, which has nearly destroyed and depopulated some sections of the south. To carry out his plans, he found it absolutely necessary to change his overseer for a young man who had no plans of his own, but was willing to obey orders.

In speaking of the operations of this gentleman it may be understood that I also include the plantations of his father and brother, as all three are conducted upon the same general system. In the first place, cotton is utterly discarded from the premises, and clover, yes, rich, luxuriant red clover, by the hundred and thousand acres, has been made to grow where nothing but brown sedge and oldfield pines grew before. Illustrative of this fact Mr. B. related to me an anecdote. There was one tract known as the "old field," containing about an hundred acres, upland, clayey, loamy soil, nearly level, "lying out," that is, abandoned as no longer fit for cultivation, covered with brown sedge, and growing up to oldfield pines.

Calling the attention of his overseer one day, who had already set him down as utterly crazy, and determined to ruin his land if not himself by his "new-fangled plows," and insisting upon having every furrow at least ten inches deep, he fairly drove the man to a standing point by ordering him to prepare that "old field" for the plow. Utterly amazed at the order, the fellow dropped the reins upon his horse's neck, turned round, and stared Mr. B. in the face as if to discover whether he was in sober earnestness, and answered him with an inquiring "Sir?" Mr. B. repeated the order, and the overseer replied: "Why, Mr. Burgwin, do you expect to raise a crop upon that field? If you do, I can assure you that I wore that land out ten years ago."

"I know it," said Mr. B.; "but I don't intend you shall wear out *my* land; and if you think you cannot conduct my business just as I think best, I will try to get some one that will do it; for I would not allow you to manage the place according to your notions, if you would give me five thousand dollars a-year."

"Well, sir, if you order it, I suppose I can clear up and plow the land; and, if you insist upon it, will turn you up a bed of brick clay, ten inches deep; but let me tell you, sir, *you will never make enough to pay for the salt your horses eat while doing it.*"

Well, the "old field" was plowed up, and manured as well as the scanty supply would afford, and planted with corn. The first crop was twelve bushels to the acre, the second, thirteen bushels, the third, six bushels of wheat; it was then dressed with a good coat of stable manure and forty bushels of lime to the acre, and sowed with wheat, in October, '48, which, if it had not been for that destructive frost in April, '49, would undoubtedly have averaged twenty, and probably twenty-five, bushels to the acre, and still carry a most excellent crop of clover, which, after receiving a bushel of plaster to the acre in May, if it does not "pay for the salt the horses eat," it will pay for a considerable quantity that the herd of cattle will require while feeding upon it. Cattle so fed are under charge of a herdsman, and at night are yarded in temporary pens upon the most barren knolls or galled hill sides; which puts them in a condition, in their turn, to produce rich crops of corn, wheat, and clover.

The order of rotation is,—commence with a field at rest, and plow ten inches deep, in April and May, and sow cowpeas broadcast, and harrow in; or break up, that is plow in the fall

or winter, turning under all the manure that can be given. In the spring, plant corn, and, at the last working of the corn, sow peas broadcast; cut off the corn in September, plow under the peas, and give a top dressing of lime, at the rate of 35 or 40 bushels per acre, and then sow and harrow in 5 to 8 pecks of wheat per acre. In February or March, following, sow 4 quarts of clover seed per acre. Harvest the wheat in June, and sow one bushel of plaster per acre in August, and allow no stock to run upon the stubble. Next April, or May, sow again one bushel of plaster per acre, and pasture lightly during the summer. In August of this year, fallow for wheat, which is seeded in October, and the clover then seeds itself. For corn, the land is thoroughly harrowed after plowing, and then planted in drills, five feet apart. Sometimes a single stalk is left every 18 inches apart, in the drills; at other plantings, two stalks of corn are left every 36 inches apart, in the drills. The corn is then cultivated with small plows, cultivators, and hoes.

Manure is used, either upon corn or wheat ground, on such parts as require it most. But after the land is brought to that state, by means of the valuable system of plowing, manure, and lime, that it will produce a good crop of clover, Mr. B. is sure of a good crop of wheat or corn, whenever required.

Lime costs about ten cents a bushel, and is applied once in five years, only. It is brought from New York in the same vessels that come after corn and wheat, which were first induced to come up the Roanoke thus far by the influence of the Messrs. Burgwin. This point is 115 miles above the sound, and vessels are towed up by steamboats. One vessel brought up 2,100 bushels of lime, last spring, which was unloaded by the hands upon H. K. Burgwin's place, in one day, and 6,650 bushels of corn, (186 tons,) put on board in three days more. The price of corn, on board, was 53 cents. Wheat, 95 cents. The Messrs. Burgwin estimate their present crop of wheat at 20,000 bushels, and of corn, last year, 26,000 bushels; and the neighborhood ships from 500,000 to 600,000 bushels of corn a-year. The amount of H. K. Burgwin's sales, last year, was $222 to each field hand; and one of his neighbors, below, Mr. Richard H. Smith, to $245—which is better than has been done in cotton for many years. Mr. Smith's entire crop sold, was ninety-three barrels of corn, and 12,000 pounds of seed cotton, to each hand, counting all in the field over fourteen years old. [A "barrel" of corn is five bushels of shelled corn.] Mr. H. K. Burgwin has made some pork in former years, but does not think it good policy to feed sound corn to hogs, at present prices of corn and pork.

While I was at these plantations, a flood in the river, which rises thirty feet, spread over much of the bottom lands. This they are about to prevent by heavy embankments; but it is a question with me whether it will pay cost; for, notwithstanding loss of crops occasionally, these overflows add immense fertility to the land.

The Messrs. B. use nine of Hussey's reapers, which they infinitely prefer to M'Cormick's; and Mr. T. P. B. was engaged in erecting a threshing machine to go by steam, similar to Mr. Bolling's, on James River, which he finds necessary to meet the demands of his increasing crops, under his, (in that region,) new system of farming; notwithstanding the predictions of neighbors, overseers, and even negroes, that he would ruin his land, break up himself, and be ready to sell out, after trying his "new-fangled notions" a year or two. Besides his deep plowing, which, it was thought by some persons, would destroy the fertility of the soil, he has made a good deal of use of the subsoil plow; and the amount of ditching which he has done is very great; but his increased crops will soon pay the expense. His crop of corn, last year, upon 600 acres, averaged thirty-one bushels; but he aims at an average of forty-five. The usual average, upon upland, will not exceed fifteen, and forty bushels is considered a great crop, even on the swamp lands upon Trent River; so says the elder Mr. Burgwin. To show the enormous increase of manure, I will state that he hauled out, last year, upwards of 3,000 four-horse, or ox loads; this is spread broadcast and plowed in. His crop sold, the same year, from the labor of fifty hands, (besides ditching, manuring, and other improvements, and making all supplies of bread and meat, and part of the clothing for the people,) was 10,000 bushels of corn, at 45 cents, and 3,000 bushels of wheat, at 90 cents. The wheat, last year, averaged, upon 270 acres, twelve bushels; and upon fifty acres of that which alone was limed, the average was twenty-two bushels—more than paying for liming in the first crop.

His growing crop, when I was on the place, was 450 acres of wheat, 350 corn, 520 clover, upon which he keeps an hundred head of cattle, and hogs unnumbered. He had, last year, however, 24,000 pounds of pork, which was mostly fatted upon "wild potatoes," peas, pumpkins, clover, and soft corn. The crops upon each of the other plantations, are upon nearly the same scale.

The Messrs. Burgwin give it as their opinion, that a planter cannot expend money in any way, with such a certainty of making an hundred per cent. upon the expenditure, as in the purchase of lime, plaster, and clover seed. If it is objected that they have no facilities to obtain it, let them remember that these gentlemen had none when they commenced operations. If the people of the southern states desire to prevent the country from becoming a desert, they must open the navigation of streams and build railroads. Do not say "we can't;" look at the New York and Erie Railroad, carried through almost impassable mountains, and you will then say, "we can, we will." Besides, if all the land upon the Roanoke were under such cultivation—and it is all susceptible of it—as these plantations and a few others are, there would be a daily line of steamboats, instead of an occasional vessel finding its way up to carry off the produce. Mr. Burgwin, senior, told me that he got one cargo of lime at his place on the Trent,

for four cents. It came as ballast, which will often be the case when the quantity of grain increases as it may, by the use of lime.

Mr. H. K. B. pointed out a spot in the midst of one clover field, still covered with broom sedge, which he left as a memento of what the whole was before lime and manure altered the whole appearance as well as fertility of the place. Mr. B. told me that there are about thirty miles of fencing upon these places, *to keep out other folks' cattle.* What a tax! But it is just so all over the United States. At his house I found a most lovely and accomplished lady, delightfully situated in the new mansion at the "Hill Side," but which, I regret to learn, has since been destroyed by fire. I hope Mr. B.'s valuable library, in which was an abundant supply of agricultural books, was saved. Mrs. B. appeared more lovely in my eyes, in consequence of meeting her in the negro quarter administering to the sick—an occupation, in my opinion, that always makes a woman angelic. She was a Greenough, of Boston; and it gives me pleasure to bear this just meed of praise to her friends there and elsewhere.

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P. S.—Since the above was written, I have had the pleasure of meeting Mr. T. P. Burgwin in this city, and he informs me that they have just shipped five head of shorthorn cattle, purchased of Mr. Vail, last summer, which they hope will not only improve their own herd, but give an impetus to improvement of the stock of all that region. They have also contracted for 40,000 bushels of lime to be sent forward. This will cost them, delivered on their plantation, ten cents a bushel. Mr. B. has just been informed that a great freshet in the Roanoke has burst their embankment and injured their crop of corn materially, and has probably destroyed a great deal of corn upon all the low grounds of other plantations.

New York, Nov. 7th, 1849.

SMALL vs. LARGE CALVES.

In the November number of the Agriculturist, Mr. Sotham has given us a very interesting communication on this subject. Although I confess to be somewhat "Durhamish" in my prejudices, yet I trust Mr. Sotham will accept my testimony in his favor, so far as small calves are preferable to large ones. I believe, with him, that a large calf, that is, large when first dropped from the cow, never yet made a prime animal; on the other hand, the small, well-bred calf, is sure to come up right.

This year I had a calf from the old, celebrated Matilda, from which Mr. Prentice has raised so many choice animals, got by Mr. Vail's imported bull, Duke of Wellington. When this calf was a few days old, with no small amount of pride I showed it to one of my neighbors, who, by the way, professes to be a good judge of stock, and to my surprise, he declared "It wan't worth twenty shillings. It wan't *big* enough to ever be good for anything." I exhibited this "runt of a calf," if any one so pleases to call it, at the late state show held at Syracuse, and was offered for it there $150, and it was then only ten weeks old. She now promises to make the best cow ever produced by Matilda, now near sixteen years old.

I cannot, however, agree with Mr. Sotham, that among the Durhams "there are *thirty mongrels* with *high* pedigrees to *one prime* beast," nor can I further agree, that because there are mongrels, *called* Durhams, that this "*condemns the breed.*"

It is certainly anything but pleasant to breeders of thorough-bred animals, to see individuals palming off upon the public their quarter and half bloods for pure-bred stock; and no one can have greater contempt for the practices of such men than myself. I sincerely wish buyers would be more careful, and breeders more honest.

I rejoice, however, to see individuals crossing their native stock with the improved breeds. Every such cross tends to improvement, and only needs to be skilfully practiced and continued, to add millions to the real wealth of our country. But let such animals be known as *grades*, and not endeavor to rank them as *thorough-bred* stock. It is this mean, contemptible practice of selling these grades as pure-bred animals, that has done more to retard improvement and discourage honest breeders, than all other influences combined. The only remedy for all who wish to procure *thorough-bred* animals, is to *look well to their pedigrees*, purchase of responsible breeders, and be willing to pay a remunerating price. In this way they can rear a herd that will be a source of real pleasure and profit to themselves, and do honor to the particular breed they may chance to prefer.

S. P. Chapman.

Clockville, Mad. Co., N. Y., Nov., 1849.

CISTERNS FOR HOUSES AND CATTLE YARDS.

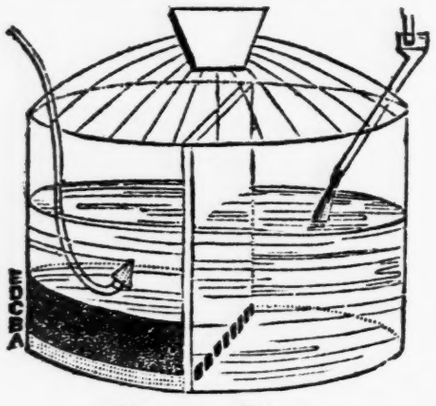
When spring or running water cannot be brought into the house or cattle yards, troughs should be placed under the eaves of the house, and every farm and out building, and the water conveyed from them by means of pipes to a large cistern. In most cases where this is done, an ample supply of water can be obtained all the year, not only for the house and domestic purposes, but for the farm stock when confined to their yards during the winter months. Any one who has never practiced this system, would be surprized at the quantity of water annually collected from the roofs of even a few buildings of ordinary size; one of our friends thus obtains sufficient for his house, stock, and also for irrigating his garden. His buildings, however, are numerous and of considerable extent.

Another great advantage of cisterns is, that if properly built and taken care of, the rain water thus obtained to fill them is always soft for washing, and palatable and wholesome to drink.

Where there is a compact clay, no further preparation is necessary for stock purposes, than to excavate the cistern of a sufficient size and depth; and to keep up the banks on every side, place two frames of single joist around it,

near the top and bottom, between which and the banks, heavy boards or plank may be set in an upright position. The earth keeps them in place on one side, and the joist prevents their falling. They require to be only tight enough to keep the clay from washing in, as no appreciable quantity of water will escape from the sides or bottom.

For household purposes, one should be made with more care and expense, and so constructed as to afford pure filtered water at all times. These may be formed in various ways, and of different materials, stone, brick, or even wood; though the two former are preferable. They should be permanently divided into two apartments, somewhat similar to the annexed cut, one to receive the water, and another for a reservoir to contain such as is ready for use.



CISTERN.—FIG. 9.

Alternate layers of gravel, sand, and charcoal at the bottom of the first, and sand and gravel in the last, are sufficient; the water being allowed to pass through the several layers mentioned, will be rendered perfectly free from all impurities. Some who are particularly choice in preparing water, make use of filtering stones, but this is not essential. Occasional cleaning may be necessary, and the substitution of new filtering materials will at all times keep them sweet.

PLASTER CASTS OF ANIMALS.

OFTEN have I admired that splendid plaster cast of a prize shorthorn heifer, belonging to Sir Charles Tempest, imported by you a few years ago; and admiring, I have been led to inquire why something in that way may not be done at home? It would be a capital opportunity for some public spirited man to show his love for the agriculture of the country, by causing a model to be made by some good artist of the best Devon, or even of the best native cow to be found, from which copies might be multiplied at pleasure at a nominal expense. Let the copies be sold cheap, and many farmers would have them who would deem it a piece of extravagance to purchase an imported one at $6. Such casts of improved American stock would form an excellent premium for agricultural societies.

Look at Power's statue of the Greek Slave, hundreds of passable copies of which are daily hawked about our streets at a quarter of a dollar each—would such a cast as I advocate be any the less classic than this? Certainly not; at least only to the extent that man is above the brute creation—both are nature's handiwork. Please give us your views upon the subject.

Boston, Mass., Oct. 15th, 1849. J. B. D.

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We entirely concur with our correspondent in the great benefit it would confer on the farming community, if good plaster casts of all improved domestic animals could be got up and distributed as stock prizes by our agricultural societies. The farmers would thus have models constantly before them to correct and improve their taste, and their children would grow up with a knowledge of the best forms of domestic animals. We have no doubt that this would be the means of making a more rapid improvement in breeding superior stock in the United States, than any other that can be carried into effect. It would be well, also, to supply every district school in the country with a case of such models, and employ a competent person to visit these schools, and point out the superiority of their forms to the children, and enlarge on the beneficial effects of breeding such throughout the country, instead of the miserable animals which are now so common.

IMPROVED STOCK AT THE SOUTH.

OUR readers will not be much surprised that improved stock does not succeed better at the South, after perusing the following extract from the letter of one of our correspondents. It is a Southern, not a Northern man who speaks.

—

Notwithstanding the extreme prejudice among the people of this vicinity against Durham cattle, I have ventured to order you to send me a yearling bull, which I intend to cross on some choice heifers which I have of the native stock, or as they are sometimes called, "old Spanish cattle." I also intend to procure some grade Durhams, which I can buy in this neighborhood for the same price as common cattle; and I hope from them with the bull you send me, to obtain some better stock than the common piny woods cattle of this State.

Those grade Durham heifers I spoke of in a former letter, are the descendants of a bull which two of my neighbors bought at Philadelphia several years ago, for which they paid $200, and brought him here at a heavy expense; kept him up for a few months, with just such care as might be expected from a careless or obstinate negro, who had conceived a violent prejudice against the animal; and because he did not thrive under such care, during the period, too, of his acclimation, (he was most injudiciously brought on in the spring,) and because his owners could not stand the ridicule which some of their thoughtless or perhaps malicious neighbors were disposed to bestow upon "the thousand dollar bull," as they termed him, he was turned out among the common scrubs in the fall, to fatten upon dry cotton stalks and frost

bitten pea vines; and finally to get through the winter upon such feed as only southern cattle can live upon; and in the spring he went to the woods to take his chance upon the poor thin grass of Mississippi, and because a delicately bred animal could not thrive well and "show his blood" in his calves, under such treatment, the whole race of improved cattle were most incontinently condemned, and this really good animal finally fatted and killed for beef, and his stock no more appreciated than a Choctaw Indian would appreciate a thorough bred Arabian courser.

Mississippi, Oct. 1st, 1849.

NOVEL METHOD OF GRAFTING.

Finding my name in your journal, as having given some instruction to my valued friend, E. J. Capell, in relation to summer and fall grafting, I am induced to send you a brief notice of my practice of that kind of grafting.

About the summer of 1825, I by request, budded or inoculated a small nursery of apples, for a friend in a distant State. Finding that I had not quite a sufficiency of scions of some varieties, I dressed the small twigs containing the terminal buds of some dozen stems, in the form of long half wedges, and inserted them under the bark in the manner of budding. Finding that these took quite as successfully as buds, and that stems from which the bark would not slip could be used as well as others, I continued to practice it; and I have found it equally successful in various kinds of trees, and at all seasons of the year, when the bark of the stock separates freely from the wood.

I last spring, grafted several Vergalieu pears in this manner into quince stocks; they are now growing. I grafted a few peach trees in this way, on the 28th of October 1848, but few trees would receive the graft. Of those that did, some will probably bear fruit next summer. I have found this method of using the terminal bud very convenient, especially in peach and nectarine trees. Many of the buds of these trees, after they begin to bear fruit, have no power to produce any thing but blossoms. The terminal bud is always a wood bud, and its shoot is vigorous.

Among the advantages of this mode of grafting, the following may be named:

1st. The process is simple, easy and may be rapidly performed. 2d. It is less liable to be injured by carelessness, &c. 3d. In case of failure from whatever cause, the stock remains uninjured, and the work may be repeated any required number of times. 4th. It may be performed at almost any period except in winter. For spring grafting, the scions should be collected before the buds swell.

A. B. Lawrence.

Liberty, Amite Co., Mississippi, Oct. 1849.

How to Shoe a Vicious Horse.—The Commercial Advertiser says, that an officer in the United States Army, recently returned from Mexico, thus subdued a horse that was troublesome in handling his feet to be shod:—

"He took a cord about the size of a common bed cord, put it in the mouth of the horse like a bit, and tied it tightly on the top of the animal's head, passing his left ear under the string, not painfully tight, but tight enough to keep the ear down, and the cord in its place. This done, he patted the horse gently on the side of his head, and commanded him to follow; and instantly the horse obeyed, perfectly subdued, and as gentle and obedient as a well-trained dog; suffering his feet to be lifted with entire impunity, and acting in all respects like an old stager. That simple string thus tied made him at once as docile and obedient as any one could desire. The gentleman who thus furnished this exceedingly simple means of subduing a very dangerous propensity, intimated that it is practiced in Mexico and South America in the management of wild horses."

SALE OF SHORTHORN CATTLE IN OHIO.

I forward you an account of administrators' sale, of the late Alfred Hadley's shorthorns and steers of this county, on the 30th of October last.

Clarksville, an imported cow 14 years old,					$ 66 00
Clarksville, second, 4 months old,					123 00
Americus, 2 years old, bred by Mr. Wm. Neff,					317 00
Adelaide, 1	"	"	"	"	171 00
Ida Bell, 1	"	"	"	"	159 00
Grazilla, 1	"	"	"	"	140 00
Pink, 5	"	"	"	"	107 00
Anna, 2	"	" high grade heifer			117 00
10 grade cows, heifers and calves,					30 to 65 00
Comet, 2 years old,			"	"	160 00
Bem, 3 months	"		"	"	155 00
Zack Taylor, 9	"		"	"	108 00
Snow Ball, 2 years			"	"	50 00
Snow Flake, 5 months			"	"	50 00
2 four years old grade steers,					80 and 75 00
50 two	"	"	" averaged each		27 06
25 one	"	"	"	"	18 00

E. Carpenter.

Briar Patch Cottage, Warren Co. Ohio Nov. 4th, 1849.

The receipt of the account of the above sale, quite rejoiced our hearts. We had not heard from Ohio shorthorns for so long a time, that we began to think they were all dead and buried with their mammoths of old. But this shows that they still appreciate them tolerable fairly, though the prices, except in two or three instances, are not what they out to be to remunerate good breeders. However, there seems to be a little waking up in these matters now. We never had so many enquiries for good stock, as during the past year, nor have so many improved animals been sold throughout the country to our knowledge, in a single year of the last ten, as in 1849.

Late Sowed Wheat in Maryland and farther South, is not so likely to be attacked by the fly as early sowed. But late sowing will not do so well at the North, for it must have time to root and tiller before the severe early frosts set in; besides wheat at the North is not liable to be attacked by the fly in autumn, it is only in the summer season that this pest injures the plant.

THE SPANISH FOWL.

SYNONYMES.—*Gallus gallinaceus*, of Naturalists; *Gallo andaluz*, of the Spaniards; *Minorcas*, in North Devon, in England; *Portugal Fowl*, *Spanish Fowl*, *Black Spanish Fowl*, of the English and Anglo-Americans.

THIS is a noble race of fowls, possessing many great merits; of spirited and animated appearance of considerable size, excellent for the table, both in whiteness of flesh and skin, and also in flavor, being juicy and tender, and laying exceedingly large eggs, in considerable numbers. Amongst birds of its own breed, it is not deficient in courage; though it yields without showing much fight to those which have a dash of game blood in their veins. It should be a general favorite in all large cities, for the additional advantage that no soil of smoke or dirt is apparent on its plumage.

The thorough-bred birds of the fancy should be entirely black, as far as feathers are concerned, and when in high condition display a greenish metallic lustre. The combs of both cock and hen are exceedingly large, of a vivid and most brilliant scarlet, that of the hen drooping over on one side. Their most singular feature is a large, white patch, or ear lobe, on the cheek, of a fleshy substance, similar to the wattles, which are small in the hens, but large and very conspicuous in the cocks. This marked contrast of black, bright-red, and white, makes the head of the Spanish cock as handsome as that of any other variety; and in the genuine breed, the whole form is equally good; but the scraggy, long-legged, mis-shapen mongrels often met with are enough to throw discredit on the whole race. Some birds are occasionally produced handsomely streaked with red on the hackles and back. This is no proof of bad breeding, if other points are right.

Spanish hens are also of large size and good figure, and are celebrated as good layers, producing very large, quite white eggs, of a peculiar shape, being very thick at both ends, and yet tapering off a little at each. They are by no means good mothers of families, even when they do sit, which they will not often condescend to do, proving very careless, and frequently trampling half their brood underfoot. But the inconveniences of this habit are easily obviated by causing the eggs to be hatched by some more motherly hen.

It has been noticed that this variety of fowl frequently loses nearly all the feathers on the body, besides the usual quantity on the neck, wings, and tail; and if they moult late, and the weather is severe, they feel it much. Nothing else can reasonably be expected to take place with an "everlasting layer." It often happens to the Guinea fowl; and the reason of it is plain. If the system of a bird is exhausted by the unremitting production of eggs, it cannot contain within itself the wherewithal to supply the growth of feathers. The stream that will fill but one channel cannot be made to keep two at high-water mark; and therefore, Mr. Leonard Barber, an English author, justly observes: "With regard to an anxiety about their constant laying, in my opinion nature ought not to be forced, as it requires a rest." But some people think it cannot be right if their hens do not lay every day.

It is doubtful whether they would readily become acclimatized in the northern parts of the United States, for continued frost, at any time, much injures their combs; frequently causing mortification in the end, which has terminated in death. A warm poultry house, high feeding, and care that the birds do not remain too long exposed to severe weather, are the best means of preventing this disfigurement.

The chicks are large, as would be expected from such eggs, entirely shining black, except a pinafore of white on the breast, and a slight sprinkling under the chin, with sometimes also a little white round the beak and eyes; legs and feet black. They do not get perfectly feathered till they are three fourths grown; and, therefore, to have these birds come to perfection, it is

THE SPANISH COCK AND HEN.—FIG. 10.

preferable to have them hatched early in spring, so that they may get well covered with plumage before the cold autumnal rains.

The black, however, is not the only valuable race of Spanish fowls, although certain London dealers, who have no right to offer an opinion, if they do not choose to give information on the subject, presume to affirm that there can be no such breed as "speckled Spanish," it being characteristic of that breed to be perfectly black; still there are some breeds, in Spain, closely allied to these which are of a blue, grey, or slaty color. Their growth is so rapid, and their eventual size so large, that they are remarkably slow in obtaining their feathers. Although well covered with down, when first hatched, they look almost naked when half grown, and should, therefore, be hatched early in the spring.

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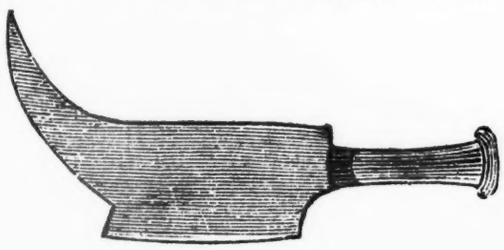
The above, together with the cut, we take from the American Poultry Yard, an elegant and appropriate work just published by C. M. Saxton, of this city.

We have no experience in this kind of fowl ourselves, but some of our friends in this neighborhood have imported them direct from Spain, and esteem them highly, having been quite successful in their breeding. They are larger than common fowls, are in good shape, and have a fine noble appearance. They make a capital cross on the larger breeds, especially with the Malays and Javas, which they scarcely deteriorate in size, yet greatly improve in form. The only objection our friends make to the Spanish fowl, is their large comb and wattles, which sometimes injure the birds when severely frozen; but as this is a highly ornamental and distinguished point with them, they dislike to cut it off. It would be an excellent breed for the south, as its comb and wattles are in no danger of being frozen in that mild climate.

PRUNING.

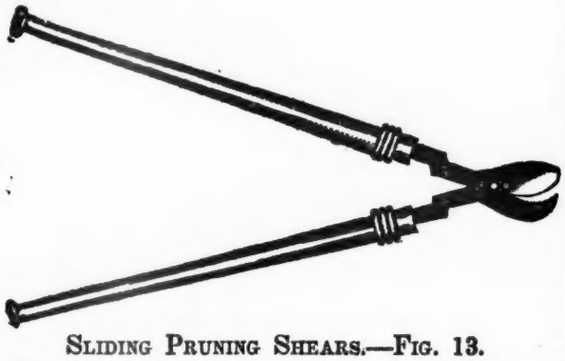
The manner in which farmers usually prune their fruit and ornamental trees is so barbarous, that they often do them more injury than good.



Bill Hook.—Fig. 11.

The sole implement which they generally use for this purpose is, the common woodman's axe—a capital tool in its way—but too heavy and rough cutting for nice pruning; for this reason it should be discarded entirely, and a wide-set and very narrow carpenter's saw substituted for removing the larger limbs; while for the smaller, and tall shrubbery, the best and most convenient implements in use, are a bill hook, fig. 11, a pruning saw and chisel, fig. 12, lopping, sliding, and pole pruning shears, figs. 13, 14, 15, and 16.

Pruning Saw and Chisel.—Fig. 12.



Sliding Pruning Shears.—Fig. 13.

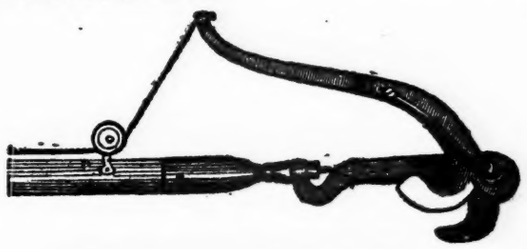
Those who have never seen a skilful pruner handle these implements among the trees and shrubbery, can have but an indefinite notion of the rapidity, smoothness, and even elegance of his workmanship; contrasted with that of the person using only the common axe, the difference is as great as between a rough-hewed, and a finely-sawed or smooth-planed plank. Nor is

Lopping Shears.—Fig. 14.

the difference less to the tree itself; for when properly pruned, the bark soon grows over the cut, and makes a smooth, healthy part of the trunk or branch. Not so, however, with the

Sliding Pruning Shears.—Fig. 15.

rough-cut. Sometimes it never grows over, and when it apparently does, it leaves that part of the tree hollow or unsound, to its lasting injury and that of the fruit.



Pole Pruning Shears.—Fig. 16.

These implements can be had now at a moderate price, and when well taken care of, they last a long time. We hope that all those who cultivate fruit trees and shrubbery, will hereafter procure a good assortment of them, and take more pains in their pruning than they have hitherto been in the habit of doing.

Guano on Wheat is now very extensively used in the fall, and proves to be the best and most profitable manure that has yet been applied to this important crop. Its use we understand is greatly on the increase. It may be harrowed in with the wheat, or sowed any time subsequently. It is most effectual when applied directly before a rain. From 200 to 500 lbs. per acre may be used according to the condition or fertility of the soil.

Ladies' Department.

CHAMBER BIRDS.—No. 3.

CANARIES.—FOOD AND MANAGEMENT OF ADULT BIRDS.—Except during the breeding season, the males may be kept in cages either bell-shaped or like those denoted in the cuts below. These may be made of wire, or rattan, and should be at least a foot high and eight inches in diameter, with one or more transverse perches.

The female is allowed either to have freedom in the room with her wings clipped, or is placed in a large breeding cage, possessing sufficient space to keep her limbs in constant exercise, and preserve them in health and strength.

In the bell-shaped, or smaller cages, wherein it must be understood only one male should be put, both the eating and drinking vessel must be placed on the outside, at the extremities of the lower perch. These should be surrounded by a cap of tin, so that the bird may not easily scatter its food. Cleanliness will often prevent these delicate songsters from suffering many disorders, and it is very desirable that the floor of the cage should be made moveable, that it may be more easily cleansed and strewed with coarse sand.

Being naturally inhabitants of a warm climate, and rendered delicate by constant residence in rooms, and so, in a manner habituated to a temperament similar to that of their own country, great care is necessary in winter, in order that the same or a similar temperature may be preserved, avoiding the exposure to cold air, which, however, refreshes in summer, cannot be otherwise than prejudicial to them, causing sickness and even death. To keep these birds in a healthy and happy frame, it is very important to observe that, in summer, they must be frequently hung in a cage in brilliant daylight, and if possible, placed in the warm sunshine, which, especially when bathing, is very agreeable to them.

CANARY BIRD CAGES.—FIGS. 17 AND 18.

The most important consideration in the management of the Canary is his food. The more simple and true to nature this is, the better does it agree with him; whereas, when too artificially compounded, it renders him sickly and weak. The best food is the "summer rape seed," which is sown in spring. This is distinguished from the "winter rape seed," which is sown in autumn, by being larger and of a darker hue. On this diet, these birds thrive very well, but it should be occasionally intermixed with some crushed hemp seed and Canary seed, for the sake of flavoring it; and this more especially in the spring, when they are intended for breeding. As a treat, we may occasionally give them a mixture of summer cabbage seed, whole oats, or oat meal, with millet or some Canary seed. Here, as in most other cases, we should strive to imitate nature.

The hen Canaries may likewise be supplied with the same kind of food as the males; but in winter, they are content with bread, containing no salt, or merely barley grots, moistened in milk, if given to them fresh every day, without being sour. Besides, both males and females may be given, in summer, some green lettuce, cabbage, groundsel, and water cresses, which must be previously washed and cleansed from anything prejudicial; and in winter, they may be fed with pieces of sweet apples. They require fresh water daily, both for drinking and bathing; and at moulting time, a rusty nail should be occasionally placed in their drinking vessel, as this tends to strengthen the stomach.

The above-named kinds of food, are for a full-grown bird; but the young require different nourishment, at least, as long as they need parental care.

As soon as the young are hatched, the old birds should be supplied with one fourth of a hard-boiled egg, minced very fine, with some roll, or bread, containing little or no salt, steeped

in water, the latter of which should be squeezed or pressed out again. In another vessel, some boiled rape seed should be placed, which has been rewashed in fresh water, to take away the acidity. Some use crackers instead of bread, but this is unnecessary. It is merely requisite to see that this soft food does not become sour, otherwise it will kill the young, and the cause remains unsuspected. Some persons merely give them their usual food, intermixing it with some finely-powdered crackers and hard-boiled eggs, but it has been found by experience, that the diet prescribed above is more efficacious, especially until the young are fledged.

It is now that the male takes the chief part in rearing the young; and upon him devolves the duty of feeding them, in order to allow the female to recover from the exhaustion she has received from incubation.

If it is necessary to feed the young by hand, grated roll or pulverized dry crackers is taken, mixed with pounded rape seed, and kept in a box. As often as it is necessary to feed them, a little of it is moistened with some of the yolk of an egg and water, and given to them from a quill pen. This must be done ten or twelve times a-day; about four penfuls is the quantity necessary for each meal.

Up to the twelfth day, the young remain almost naked, and require to be covered by the female; but after the thirteenth, they will feed themselves. In cold, dry years, however, it sometimes happens that the birds get scarcely any plumage at all. When they are a month old, they may be removed from the breeding cage. With the usual food of the old birds, they must be fed for some weeks upon the kinds above named; for, the sudden removal from soft food often occasions death, especially in moulting. It is asserted, and not without reason, that those Canaries which are reared in an arbor, where they have space to fly about within an enclosure of wire, are longer-lived and stronger than those which are reared in a chamber.

It is a curious fact, perhaps not known to every one, that, when there are two females with one male in a cage, and one dies, the other, if she has not already sat, will hatch the eggs laid by her co-mate, and rear the young as her own; and, during this foster-mother's care, cautiously avoid the caresses of the male!

When the young birds can eat alone, say at the age of thirteen or fourteen days, and often before quitting the nest, the males commence warbling, and the females also, but less connectedly, and from this, the sexes may be distinguished. To teach a young Canary to sing, he must now be separated from his comrades, as well as from other birds, and placed in a small wire cage, which, at the commencement, must be covered with linen, and subsequently, by degrees, with thicker woollen cloth, when a short air, or other musical piece, must be whistled to him, or a flute or a small organ may be used. This lesson should be repeated five or six times a-day, especially mornings and evenings, and in five or six months, he will be able to acquire the air, according to the power of his memory.—*Americanized from the German.*

TO CURE BURNS.

TAKE soot from a chimney or stove where wood has been burned, pulverize it finely, and mix with lard or any fresh grease in the proportions necessary to form a soft mixture. Spread this on linen cloths and apply without delay, carefully covering from the air. The bandage may remain until the burn is healed, which is generally effected without any subsequent scar. When the application is prompt, and no vital part affected, the relief is almost instantaneous, and the cure speedy and certain. This has been tested in numerous cases under our own observation, and it has been known to restore to life a child who had been scalded from head to foot in a steamboat explosion, and who was laid aside as a case past hope. Even when the injury has occurred a day or two previous to any knowledge of the cure, it has proved soothing and effectual.

Flour spread upon a bandage and closely bound over the affected part is recommended by the best practitioners. A thick wadding of cotton is also a good application, though we prefer the first to any other remedy.

If blisters appear, they should be punctured with a needle. If the dressing becomes soiled from discharges, it must be renewed. If clothing takes fire, surround the person with a hearth rug, woollen blanket, buffalo robe, or any non-combustible to extinguish the flame; and then *cut*, not *draw* off stockings and clothes from the affected limbs.

NEW FORM OF FLOWER-POTS.

ONE reason why plants, potted the usual way, do not flourish well in the house during the winter season, is the proper want of leakage, or drainage, and a due circulation of air about their roots, in consequence of the close connexion between the bottom of the pot and the shelf or bench on which it rests.

Mr. M'Intosh, gardener of the Duke of Buccleuch, has obviated the above objection by making his pots with feet, as represented in the adjoining cut. By this means, the plants get rid of their moisture, and freely receive air about their roots through the hole in the bottom of the pot.

FLOWER-POT.—FIG. 19.

BEEF-TEA.—Cut a pound of solid beef into very small dice, which put into a stew-pan with a small pat of butter, a clove, two button onions, and a salt-spoonful of salt; stir the meat round over the fire for a few minutes, until it produces a thin gravy; then add a quart of water, and let it simmer at the corner of the fire for a quarter of an hour, skimming off every particle of fat. When done, pass it through a sieve, which is much better than a cloth, as it does not injure the flavor. The same, if wanted plain, is done by merely omitting the vegetables, salt, and clove; the butter cannot be objectionable, as it is taken out in skimming. Pearl barley, vermicelli, rice, &c., may be served in it, if required. —*Modern Housewife.*

Foreign Agricultural News.

We are in receipt of our foreign journals to 24th November.

Ashes dull. *Cotton* had declined ¼*d* per lb., and small sales. *Wheat* and *Flour* receding in prices, and large stocks of all kinds of grain accumulating. *Indian Corn* an advance of 6*d.* per quarter. *Cheese* a slight advance. All other American produce dull at slightly declining prices.

Money very abundant at 2 to 3 per cent. There are nearly £16,000,000 bullion in the Bank of England, which is about $80,000,000.

Large Geranium.—A noted grower of geraniums, who lives near Portsmouth, is said to possess a geranium which measures twelve feet round, and which has yielded, during the present season, 715 bunches of blossoms.

Victoria regia at Chatsworth.—This very extraordinary South-American water lily, which occupies a large tank, built for the purpose, in one of the stoves at Chatsworth, is just coming into bloom, and will probably open its first flower in the course of two or three days.

Waste of Manure.—It is computed by an English paper, that the worth of fertilizing matters discharged into the Thames through the sewers, (and totally lost,) of London, would, if saved and applied to the land, produce grain sufficient to yield 250,000,000 lbs of bread. This is "casting bread upon the waters" in a way not likely to return with blessings to the donors.

Large Yucca gloriosa.—There is now growing at New Close, the seat of Thomas Cooke, Esq., near this town, the largest specimen of the above-named plant I have yet seen. It stands 10 feet 6 inches high, the girth of the main stem being 3 feet 4 inches near the ground; and where 14 distinct heads branch off, the stem is 2 feet 8 inches round. The circumference of the plant is 32 feet round the top; and as a proof that it is in good health, there are 12 more young shoots breaking from the main stem.

Hungarian Farmers.—It is said that the celebrated patriot, Ladislau Ujhazy, (pronounced Welhazy,) late Governor of Comorn and its dependences, will soon arrive in the United States, with 96 of his compatriots. It is their intention to settle among us. Governor Ujhazy's large estate, at Budamar, was one of the best cultivated in Hungary; in fact, it was considered a *model farm.* It has been completely devastated by the Austrian armies, and is now confiscated. We hope these noble Hungarians will be successful in raising themselves up equally good estates in our own happy country. Here they will at least escape the brutal Austrian bayonet and prison.

Proposed Abolition of Bull Fights in Spain.—It is said that one of the first acts of the newly-created Junta General of Agriculture, at Madrid, will be to recommend the gradual suppression of bull fights, in consequence of their prejudicial effects upon the material interests and the morality of the country. It is calculated that 4,000 horses annually perish in Spain upon the horns of the bull, which is more than Napoleon ever had killed in nine years' warfare; and, in a country essentially agricultural, like Spain, this continued and cruel destruction of a useful animal, deprives those who dedicate themselves to the culture of the soil of a large amount of working power that might be applied to the augmentation of their prosperity. The annual destruction of 1,500 bulls in the various fights celebrated throughout the Peninsula, destroys the best working breeds, impairs the quality of beef, impoverishes the milk markets, contributes to the decadence of pastures and fields, and augments the prices of butter and milk, which, in civilized countries, are counted amongst the necessaries of life. All these considerations, and the fact that the people, by attending bull fights, acquire habits of brutality and ferocity, by becoming accustomed to scenes of bloodshed, is likely to induce the government to attend to the representations of the Junta of Agriculture.

Flax-Cotton.—It perhaps may not be generally known, even by those engaged in flax, that by completely robbing the fibre of its gum, we get immediately a fine downy material like raw cotton, only somewhat stronger. The strength of the flax is rather diminished by this process, but still the fibre is superior to cotton, and it may be passed through all the present cotton machinery in the subsequent processes. This cannot fail to be highly interesting at this moment, when we are threatened with a scarce, and consequently dear and inferior, supply of cotton; and since much flax stalk is thrown away, both at home and in India, the plant being cultivated for the seed, it follows we have here, *primæ facie,* a much less expensive raw material than cotton.

The Brugmansia—the Rosa sanguinea, and China Rose.—At Gordon Castle, near Fouchabars, the seat of the Duke of Richmond, there is, at present, in the conservatory here, a superb specimen of Brugmansia (Datura) arborea, the stem of which reaches the height of twelve feet, where it branches off gracefully, forming a complete canopy over the tops of its less lofty associates. It has been in blossom since the middle of June, and even now its flowering energies do not seem to be the least impaired, for hundreds of flower buds are still in various stages of development. Associated with it, is another plant remarkable for the quantity of flowers it produces, viz: Rosa sanguinea—an old-fashioned plant, to be sure, but, when properly treated, one that never fails to yield us abundance of flowers. This valuable China rose is planted against a pillar; and, after being carried to a sufficient height, it is disposed on arches, over which it has a pretty appearance. From its base to the extreme points of its various ramifications, it is loaded with rich-colored blossoms.

Ghent Horticultural and Agricultural Show.—Belgium has long been celebrated for its extensive nurseries and numerous botanical gardens; but of all its cities, Ghent stands pre-eminent. The horticultural exhibition, which was held on the 16th September, at the Casino, gave ample proof of its determination to maintain the character it has so justly merited for skill and enterprise. There is perhaps no city in Europe able to compete with it in collections of palms, cycads, ferns, and pandanus, to say nothing of orchids, camelias, and azaleas, which are here propagated on a most extensive scale; the orders for camelias from England alone are supposed to average between 10,000 and 20,000 plants per annum. On this occasion every one seemed to feel it his duty to uphold the reputation of his country, and they had the satisfaction of seeing not only the noble *salons* of the Casino entirely filled with plants and fruit, but numerous collections of camelias, conifers, oranges, hardy evergreens, and flowering plants, tastefully arranged in the front and back of the building, while the amphitheatre in the rear was specially set apart for agricultural produce. The whole was well got up, and great credit is due to the managers for the taste displayed, particularly at the grand entrance, under the dome, which represented a "Jardin Anglais," composed of noble palms, conifers, cycads, camelias, and orchids. The exhibition was honored by the presence of the King, Queen, and royal family, who came in state, with the Prince Royal of Sweden, and many of the Belgian nobility. The weather was fine, and the company as numerous as the most ardent lover of flowers could desire.—*Gard. Chron.*

Editors' Table.

To Exchange Papers.—We shall feel quite obliged to our exchanges, if they will do us the favor to notice the Agriculturist, and give the terms for subscription in brief. We think they will find this a highly valuable number. It contains numerous articles, nineteen illustrations, is printed on new type, cast expressly for it, and the paper used is of a superior quality. Our illustrations cost us $500 a-year, and other expenses are proportionately heavy. It now requires a subscription list of *ten thousand* to pay expenses of publication. For further particulars, see the article "Our Present Volume," page 11th.

Who is Reviewer?—We intended to have answered this question in this number; but our visit to the "Captain," being among the last articles sent to the printer, was unfortunately left over for want of room. It will appear in February, sure.

Post-Office Matters and Mail Arrangements.—*Success of Cheap Postage.*—Maugre all the apprehensions of the croakers heretofore connected with the P. O. Department, comparatively, cheap postage is entirely triumphant. The gross revenue for the year ending June 30th, was $4,905,176; the expenditures for the same period, $4,470,049; while it is estimated the receipts for the current year will be $5,783,848, and the expenses $4,750,138. If congress and the departments could muster common sense enough to put the maximum postage at 5 cents, for the greater distances, and the minimum at 2 cents, for the least, they would soon have money to invest in the government stocks.

Lard Oil.—There seems no end to the pork statistics of Cincinnati. It is estimated that 11,000,000 lbs. of lard, or its equivalent in pork, will be used for making lard oil, the present season, in that city. Nearly one third of the raw material will be converted into stearine. At one of the lard manufactories, 600 dressed swine can be reduced to lard per day. Seven large, circular tanks hold in the aggregate 96,000 lbs. After taking off the hams, the remainder of the carcase entire is thrown into these, and steam is then admitted at a pressure of 70 lbs. to the inch, when the grease throughout the whole carcase is effectually extracted.

The Great Industrial Exhibition in London in 1851.—The proposed subjects of exhibition are fourfold: raw materials, machinery and mechanical inventions, manufactures, sculpture and plastic art in general. The design is comprehensive, and there is no taste which will not find its food in such variety of store. The arrangement is progressive: it begins with the rude mass, without form and void, and ascends to the noblest conceptions of man, as far as they admit of material substance and form. It is proposed that the first quinquennial exhibition shall begin the half century, in 1851. All nations are invited without distinction or preference. The prizes are to be one money prize of £2,000, four of £1,000, one in each of the above sections, and medals, which it is hoped may be conferred by the Queen. The promoters of the splendid design feel no misgiving as to the possibility of raising £100,000, ($500,000,) or more, for the general expenses of the exhibition; and the many influential names, both in the provinces and in the metropolis, now pledged to the undertaking, leave us at ease on this point. What more is wanting to the success of so grand and so useful a design, than the zeal of science, and the substantial encouragements of enterprise and wealth? The pecuniary amount of the prizes, not to speak of their glory, is certain to allure all nations to the arena. In that universal competition, it is impossible but that all will mutually impart something of their several excellencies; England her mechanical ingenuity, America her boldness of invention, France her unequalled delicacy and novelty of taste, and even the least and lowest nation its traditionary crafts and household lore.

Great Show of Poultry.—The New-England Convention of domestic-fowl breeders and fanciers, held their first show at Boston, on the 15th and 16th of November. It was a large display of various kinds, shapes, and colors. There was the magnificent swan, the superb goose, the waddling duck, the gaudy peacock, the splendid turkey, the bright Guinea hen, the strutting barn-door fowl, and the meek-eyed pigeon. From 8,000 to 10,000 persons were present, and the sales of all kinds were quite large. Cochin-China fowls, weighing a dozen pounds or so, brought from $10 to $20 per pair; and little Bantams, weighing only five ounces each, sold for half these prices. Among other curiosities present, was a *venerable goose*, belonging to Col. Jaques, of Charlestown, which, if we may *credit the papers*, has produced, in her useful life, *five thousand* descendants, each of which sold for $5. This would amount to *twenty-five thousand dollars!* She must have laid *golden eggs* indeed, and be better stock than California mines.

Great Potato Crop.—Mr. Nickerson, of Piscataquis, Me., raised 4,000 bushels of potatoes on ten acres of ground, last season. They were worth 25 cents per bushel, which would be $100 per acre. This certainly is profitable farming.

Good Cows.—The cows which received the premiums of the Essex-County (Mass.) Agricultural Society, last year, gave the following products: The one which took the first premium was six years old, and of mixed breed; from 3d of June to 3d of July, she gave an average of 18 quarts of milk per day, beer measure, which yielded 10 pounds of butter per week. Her feed common pasture only. The one which took the second premium gave, from April 28th to September 28th, 2,405 quarts of milk. The one which took the third premium was eight years old, a cross of the Durham breed. She gave, from the 27th of May to the 25th of June, an average of 15½ quarts per day, which yielded a little over 2 pounds of butter per day. weighed after it had been twice thoroughly worked, In 121 days, her milk gave 192 pounds of butter. Her feed was good pasture, with 15 quarts of meal during the trial of 30 days. The one which took the fourth premium, was nine years old, and gave, in one year, 8,767 pounds of milk—probably about 4,383 quarts—or an average of about 12 quarts per day. The one which took the fifth premium, was eight years old, and afforded 15 pounds of butter in a week, in July last. Her feed common pasture, and one quart of meal per day. The one which took the sixth premium, gave 2,448 quarts of milk from April 25th to September 26th.—*The Plow, Loom, and Anvil.*

Agency for the Purchase of Articles of Domestic Economy, &c.—We would call the attention of our readers to the advertisement of Mr. Browne, on the following page, as affording a proper medium for obtaining almost everything required for ornament or use. His experience, as a traveller, a nautical man, and a practical engineer, as well as his knowledge of commerce, the sciences, and the arts, is a sufficient guarantee for the faithful execution of such orders as may be committed to his charge.

Large Turnip.—Mr. Reuben Eaton, of this place, has raised a ruta-baga turnip that weighed, when first taken from the ground, *twenty-six* pounds. Mr. E. took the premium for the best crop last year.—*Waterville Mail.*

To Correspondents.—Whoever writes us a good article of a page or more in length, shall be entitled to the Agriculturist one year gratis.

Review of the Market.

PRICES CURRENT IN NEW YORK, DECEMBER 10, 1849.

ASHES, Pot,	₱ 100 lbs.	$6.62	@	$6.69
Pearl,	" do.	6.31	"	6.38
BALE ROPE,	" lb.	09	"	11
BARK, Quercitron,	" ton.	40.00	"	41.00
BEANS, White,	" bushel.	75	"	1.25
BEESWAX, American, Yellow,	" lb.	19	"	22
BOLT ROPE,	" "	10	"	11
BONES, Ground,	" bushel.	40	"	55
BRISTLES, American,	" lb.	25	"	65
BUTTER, Table,	" "	15	"	25
Shipping,	" "	09	"	15
CANDLES, Mould, Tallow,	" "	10	"	13
Sperm,	" "	25	"	40
Stearine,	" "	20	"	25
CHEESE,	" "	05	"	10
COAL, Anthracite,	2,000 lbs.	5.00	"	6.00
CORDAGE, American,	" lb.	11	"	13
COTTON,	" "	09	"	13
COTTON BAGGING, Am. hemp,	" yard.	15	"	16
FEATHERS,	" lb.	30	"	40
FLAX, American,	" "	08	"	09
FLOUR, Ordinary,	" bbl.	4.12	"	5.00
Fancy,	" "	5.12	"	6.50
Richmond City Mills,	" "	6.50	"	6.75
Buckwheat,	" "	—	"	—
Rye,	" "	2.81	"	3.00
GRAIN—Wheat, Western,	" bushel.	95	"	1.25
" Red and Mixed,	" "	80	"	1.15
Rye,	" "	58	"	60
Corn, Northern,	" "	58	"	60
" Southern,	" "	55	"	60
Barley,	" "	60	"	63
Oats,	" "	40	"	48
GUANO, Peruvian,	2,000 lbs.	45.00	"	50.00
Patagonian,	" do.	30.00	"	35.00
HAY, in Bales,	" 100 lbs.	45	"	55
HEMP, Russia, Clean,	" ton.	195.00	"	200.00
American, Water-rotted,	" "	160.00	"	200.00
" Dew-rotted,	" "	140.00	"	175.00
HIDES, Dry Southern,	" "	08	"	09
HOPS,	" lb.	06	"	17
HORNS,	" 100.	2.00	"	10.00
LEAD, Pig,	" 100 lbs.	4.20	"	4.25
Pipes for Pumps, &c.,	" lb.	05	"	07
MEAL, Corn,	" bbl.	2.87	"	3.38
" Corn,	" hhd.	14.75	"	15.50
MOLASSES, New-Orleans,	" gallon.	25	"	30
MUSTARD, American,	" lb.	16	"	31
NAVAL STORES—Tar,	" bbl.	1.62	"	1.88
Pitch,	" "	1.25	"	1.75
Rosin,	" "	95	"	1.10
Turpentine,	" "	2.44	"	2.75
Spirits of Turpentine,	" gallon.	35	"	37
OIL, Linseed, American,	" "	70	"	75
Castor,	" "	1.50	"	1.75
Lard,	" "	60	"	70
OIL CAKE,	" 100 lbs.	1.25	"	1.50
PEAS, Field,	" bushel.	75	"	1.25
Black-Eyed,	" 2 "	1.50	"	1.75
PLASTER OF PARIS,	" ton.	2.00	"	2.75
Ground, in barrels of 300 lbs.		1.12	"	1.25
PROVISIONS—Beef, Mess,	₱ bbl.	8.50	"	11.00
" Prime,	" "	6.00	"	8.00
" Smoked,	" lb.	06	"	12
" Rounds, in Pickle	"	04	"	06
Pork, Mess,	₱ bbl.	10.00	"	12.00
" Prime,	" "	6.50	"	10.00
Lard,	" lb.	06	"	07
Bacon Sides, Smoked,	" "	03	"	04½
" In Pickle,	" "	03	"	04
Hams, Smoked,	" "	05	"	09
" Pickled,	" "	04	"	07
Shoulders, Smoked,	" "	01	"	06
" Pickled,	" "	03	"	05
RICE,	" 100 lbs.	2.25	"	3.62
SALT,	" sack.	90	"	1.43
" Common,	" bushel.	20	"	35
SEEDS—Clover,	" lb.	06	"	07½
Timothy,	" bushel.	2.00	"	3.50
Flax, Clean,	" "	1.45	"	1.50
" Rough,	" "	1.40	"	1.47
SODA, Ash, (60 per cent. soda,)	" lb.	03	"	—
Sulphate Soda, Ground,	" "	01	"	—
SUGAR, New-Orleans,	" "	04	"	06
SUMACH, American,	" ton.	35.00	"	37.00
TALLOW,	" lb.	07	"	08
TOBACCO,	" "	03	"	10
WHISKEY, American,	" gallon.	26	"	27
WOOLS, Saxony,	" lb.	40	"	60
Merino,	" "	35	"	40
Grade Merino,	" "	30	"	35
Common,	" "	20	"	30

NEW-YORK CATTLE MARKET.

At Market—1,000 Beeves, (300 southern, the remainder mostly from this state,) 55 Cows and Calves, and 5,000 Sheep and Lambs.

Beef Cattle.—The supplies of Beeves are gradually diminishing as the winter advances; prices are getting a little firmer; the average of the market is $5 @ $7.75, at which price sales of good retailing qualities have been made. There would be about 100 head left over. The market closes dull.

Cows and Calves.—Sales at from $20 @ $45; demand good. All sold.

Sheep and Lambs.—Sales of Sheep at from $1.12½ @ $4, as in quality; Lambs $1 @ $2.75; 500 left over.

Hay and Straw.—Sales bale hay at from 3*s.* 6*d.* @5*s.* 6*d.* per 100; loose from country wagons, 4*s.* 6*d.* @ 6*s.* Straw, $2.25 @ $3 the hundred bundles.

REMARKS.—Cotton, Flour, Grain, and Provisions have receded slightly since our last; and, as all Europe is now at peace, and the crops have been good there the preceding year, we must look for a still further reduction of prices, though probably to only a moderate extent. This should stimulate us to manufacture everything that we possibly can for ourselves. The less we import, and the more we manufacture at home, the richer and more independent we shall be.

The weather still continues mild, and highly favorable for the sugar planters. In consequence of large numbers of squirrels emigrating south, and snowbirds, in considerable flocks, making their appearance thus early, a hard winter is anticipated by the popular sight-seers. However, about this we can tell better next spring; but it will be wise for every one to be well prepared for cold weather, and then if it does come, they will not suffer from it.

TO CORRESPONDENTS.—We are much obliged for the useful variety of your communications the past month, and trust you will keep them up with equal spirit throughout the year. There is nothing like a good correspondence for an agricultural paper. Every one who contributes a page or more of good matter, will be entitled to the Agriculturist, gratis, for one year. Sergeant Teltrue, and several others, came too late for this number, it having been put to press a week earlier than usual, so as to be got off before the holidays.

FARM IN DUTCHESS COUNTY.—The farm of J. F. Sheafe, Esq., situated near New Hamburg, Dutchess county, seventy miles from New York, is now offered for sale. It contains about 160 acres of an excellent quality of soil, in first-rate condition, and an extensive and complete set of farm buildings. The whole will be sold together, or divided into lots to suit purchasers.

This farm can be reached in three hours from New York, by the Hudson River Railroad. The depôt at New Hamburg is only one mile distant.

Gentlemen wishing to possess a first-rate farm, under a high state of cultivation, or to obtain beautiful sites for country residences, will find this one of the most desirable locations on the Hudson. The ground is elevated, and commands varied and delightful views of the river, the highlands, and adjacent villages and country. The location is healthy, the roads uncommonly fine, and good schools and churches in the immediate neighborhood. For further particulars, address A. B. ALLEN,
jan 189 Water st.

A VALUABLE FARM AT AUCTION.—The place on which I reside, (if not before sold,) will be disposed of to the highest bidder, at 10 o'clock A. M., on the 7th of March next, on the premises, on Raritan Bay, South-Amboy Township, Middlesex county, N. J., together with all the Stock, Farming Implements of the best sort, and the Household Furniture, substantial and ornamental.

The sale will be peremptory, and on the most easy and accommodating terms.

The farm is beautifully situated, in a very high state of cultivation, and the improvements are of the most substantial and useful character. There is fine fishing, shooting, and sailing, on an extensive bay in sight of the ocean.

The farm can be seen at any time, and can be approached through South Amboy, or Middletown Pt., from both which places it is equi-distant. Apply to

JOHN TRAVERS, on the premises,
or REID & CRAIG, at Middletown Point. jan 4t

IN PRESS.

THE AMERICAN POULTRY YARD; Comprising the Origin, History, and Description of the Different Breeds of Domestic Poultry, with Complete Directions for their Breeding, Crossing, Rearing, Fattening, and Preparation for Market; including Specific Directions for Caponizing Fowls, and for the Treatment of the Principal Diseases to which they are subject. Drawn from Authentic Sources and Personal Observation. Illustrated by Numerous Engravings. By D. J. BROWNE, Author of Sylva Americana. With an Appendix, embracing the Comparative Merits of the Various Breeds of Fowls, by SAMUEL ALLEN.
C. M. SAXTON, Publisher, 121 Fulton st.

COOKING RANGES AND STOVES, Parlor Grates, &c., furnished at order at the following rates:—*Newly-Improved Patent Cooking Ranges*, at $30, $35, $40, and $48 each. Utensils and fixtures extra, varying from $15 to $100 each range. *Cooking Stoves*, at $16, $20, $24, $18, $23, $26, and $30 each, including utensils. *Parlor and Cottage Stoves*, at $5, $6, $7, $8, $10, $12, and $15 each, adapted for burning wood or coal.
D. J. BROWNE,
At the Agricultural Warehouse of A. B. Allen & Co.,
jan 2t* 189 Water street, N. Y.

ROCK SALT.—This Salt is as hard as alum, and is the best known. It comes in large lumps, and is the most *suitable and economical* kind for stock. It may be placed on the ground in the open field where it will be exposed for years to the weather with but little waste. It is the best kind to put in a rack, manger, or trough, to be licked by horses, cattle, and sheep, as they may desire. By this means stock never get an excess, or suffer injury from its use. Price $1 per hundred pounds, for a single barrel.
jan A. B. ALLEN & CO., 189 and 191 Water st., N. Y.

CAUTION.—As certain houses in this city are in the habit of selling Agricultural and Horticultural Implements, and Field and Garden Seeds, representing them as coming from our establishment, the public is cautioned to be on its guard against imposition. All implements and parcels sold by us, which it is possible to mark, will be found branded "A. B. Allen & Co., 189 and 191 Water street, New York."

When designing to call at our warehouse, please to be careful and look for the right numbers, as above, otherwise impositions may be practiced upon the unwary.
jan A. B. ALLEN & CO., 189 and 191 Water st., N. Y.

FARM FOR SALE.—The Dairy Farm of 200 acres, belonging to David S. Mills, at Newtown, L. I., upon which he now resides, is offered for sale—the whole, or in parcels. The well-known reputation of the above farm furnishes fully its character and advantages, it being second to none in the Union; also, the entire stock, &c., belonging to the same. For terms, apply to David S. Mills, on the premises, 5 miles from Williamsburgh Ferry, on Jamaica turnpike road, or to H. Meigs, American Institute, N. Y. au 6t

COMMERCIAL GARDEN AND NURSERY, PARSONS & CO., at Flushing, near New York. The proprietors of this establishment invite public attention to their large assortment of every desirable variety of Fruit and Ornamental Tree or Shrub. Their importations of everything new in Europe are annually continued, and they offer a very large variety of Ornamental Trees and Shrubs imported expressly for arboretums and pleasure grounds. Their collection of Roses is annually enriched by novelties from abroad, many of which may be found described in their new work on the Rose, recently published. Fruit Trees receive their particular attention, and are propagated under their personal supervision; this care, with their possession of extensive specimen grounds, in which is tested every variety of fruit they cultivate, enables them confidently to guarantee the genuineness of the varieties.

Their care in pruning and cultivation enables them also to send out thrifty and well-formed trees. From their large scale of propagation, they can offer to dealers very liberal discounts, where hundreds or thousands are taken. Orders or inquiries can be addressed to the proprietors at Flushing, near New York, where catalogues will also be furnished. They have established a Branch at Brighton Depôt, near Boston, and by the entire success of their trees transplanted thither, have thoroughly proved the superior adaptation of Long-Island Trees to the soil and climate of any part of New England. This they attribute to the perfect maturity attained by the wood before frost, which renders the trees suitable for transportation to any latitude.

At the season of transplanting, a salesman will be at their Brighton Branch to furnish those who may prefer obtaining their supply thence. mhtf

MINER'S PATENT EQUILATERAL BEE-HIVE.—This highly valuable hive may be had for $3, with a right to make the same, of Messrs. A. B. Allen & Co., 191 Water st., N. Y., who are my Agents. In proof of the great merit of this hive, I would state that I had a swarm of bees placed in one of the above hives about the first of last July, and some *forty* pounds of honey were stored in the supers, while *thirteen* other hives adjoining did not produce that quantity in the aggregate! Rights in pamphlet forms, with full engravings of all its parts, and ample directions to make said hives and manage bees therein, will be sold for $2 on addressing the undersigned, by mail, at "Clinton, Oneida county, N. Y." Moneys sent at my risk, and the safe delivery of Rights guaranteed. Agents wanted to make and sell hives and rights in any section of the country.—Terms liberal, address as above.

MINER'S AMERICAN BEE-KEEPER'S MANUAL, 350 pages, 35 fine engravings—Price $1. For sale at all the principal Bookstores in the United States. Published by C. M. SAXTON, 121 Fulton street, New York. dec tf T. B. MINER.

GREAT SALE OF SHORTHORNS.—Mr. SHEAFE, of Dutchess Co., N. Y. will offer his superior stock of Shorthorn Cattle at public sale, in June next. This is one of the finest and best bred herds in the United States. The cows greatly excel as milkers, especial pains having always been taken to select and perpetuate this important point in breeding. The cows will probably all be in calf by the superb bull Exeter, imported last year, from Mr. Stephenson, of Durham, England. Mr. Stephenson's stock is of the Princess tribe of Shorthorns, which take the same rank in England as Mr. Bates' celebrated Duchess tribe. For further particulars address
A. B. ALLEN, New York.

WATCHES AND CHRONOMETERS, Procured at order, and warranted by the importers to keep good time for one year, at the following prices:—*Gold, Hunting Watches*, at $50, $75, $80, $90, $100, $125, and $150 each. *Silver ditto*, $20, $25, $30, and $35 each. *Chronometers*, designed for nautical or astronomical purposes, $75, $100, $125, $150, $175, $200, and $250 each.
D. J. BROWNE,
At the Agricultural Warehouse of A. B. Allen & Co.,
jan 3t* 189 Water street, N. Y.

ALLEN'S IMPROVED PORTABLE RAILROAD HORSE POWER AND OVERSHOT THRESHER AND SEPARATOR.—The advantages of the above horse powers are—1. They occupy but little more space than a single horse. 2. They can be moved by the weight of the horse only, by placing them at an angle of 10 or 15 degrees. 3. They are comparatively light and portable, and can be easily transported. 4. They are simply constructed, not liable to get out of order, and move with little friction, the revolving plane gearing without any complex or intermediate wheels, directly into the pinion upon the shaft on which the pully belt runs.

Price of single Power,.....$80
" " Thresher,.....$28
" Separator and fixtures,..... $7
" Bands for driving, etc.,..... $5
" Wood-sawing machine, complete, and in running order,.....$35

The price of the double power, thresher, separator, &c., complete, is $145, including right of using. The above are sold singly or together, as desired.

The above power is warranted to work well and give satisfaction.

A. B. ALLEN & CO.,
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